U.S. ECONOMIC FREEDOM INDEX

2008 REPORT

Lawrence J. McQuillan
Michael T. Maloney
Eric Daniels
Brent M. Eastwood

Foreword by Arthur B. Laffer

PRI PACIFIC RESEARCH INSTITUTE

IN ASSOCIATION WITH Forbes

U.S. Economic Freedom Index: 2008 Report

Lawrence J. McQuillan
Michael T. Maloney
Eric Daniels
Brent M. Eastwood

PACIFIC RESEARCH INSTITUTE

In Association with Forbes

When you can measure what you are speaking about, and express it in numbers, you know something about it. But when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind: it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be.

Lord Kelvin
19th-century British physicist

U.S. Economic Freedom Index: 2008 Report
Lawrence J. McQuillan, Michael T. Maloney, Eric Daniels, and Brent M. Eastwood

ISBN-13: 978-1-934276-10-5
September 2008 | $24.95

Pacific Research Institute
One Embarcadero Center, Suite 350
San Francisco, CA 94111
Tel: 415-989-0833/ 800-276-7600
Fax: 415-989-2411
Email: info@pacificresearch.org
www.pacificresearch.org

Additional print copies of this study may be purchased by contacting us at the address above, or download the PDF version at www.pacificresearch.org.

Contents

Foreword

Economists agree that institutional factors play a key role in a country's economic performance. The evidence that institutions and economic policies matter at the country-level is hard to ignore. East Germany versus West Germany and North Korea versus South Korea are stark examples. The tremendous success of Ireland and Iceland show that the benefits of pro-growth supply-side tax reforms are not limited to comparisons with communist dictatorships. Economic theory really works: when investors receive higher after-tax returns, they channel more of their funds to that region. When employees enjoy lower marginal tax rates, they work more.

What is true at the national level holds true at the state level as well. The Pacific Research Institute, in association with *Forbes* magazine, has released another edition of its *U.S. Economic Freedom Index,* one of the few scholarly analyses and rankings of U.S. states based on how friendly or unfriendly state government policies are toward free enterprise and consumer choice. PRI's latest report dovetails with the findings of my own work with Stephen Moore of the *Wall Street Journal* in *Rich States, Poor States.* The results are obvious but worth repeating: those states ranked higher in objective measures of economic freedom tend to have higher growth rates in income, employment, and population.

PRI's latest analysis confirms that states that cut their marginal tax rates, enact right-to-work legislation, and limit frivolous jury awards see an influx of capital, people, and businesses. This expands the tax base, leading to larger (and less volatile) revenue streams, compared to those states that raise taxes and enact other anti-growth measures. An interesting twist in PRI's 2008 edition is Brent Eastwood's finding that the benefits of economic freedom are realized even at the *city* level. The lesson is clear: policymakers and investors need to pay closer attention to the predictive power of a region's level of economic freedom.

Arthur B. Laffer, Ph.D.
Founder and Chairman,
Laffer Associates and Member of President Ronald Reagan's Economic Policy Advisory Board

Preface

As president of the Pacific Research Institute (PRI), I am pleased that the *U.S. Economic Freedom Index: 2008 Report* now emerges in its third edition. Like previous editions, this one is grounded in the same rigorous statistical analysis and will serve as an important tool for measuring how friendly, or unfriendly, each state government is toward free enterprise and consumer choice. That is important for policy makers to know, but not them alone.

The *Index* provides a reliable metric of economic freedom, and encourages a discussion among the public and in state legislatures about economic freedom, along with areas for policy reform. Legislators can also use the *Index* to ponder the consequences of inaction. Two effects of limiting economic freedom, the report confirms, are that people flee economically oppressive states, and those residents who remain are made poorer. Legislators can change those outcomes by expanding economic freedom in their states, and the *Index* will help them in that task.

Dr. Lawrence J. McQuillan, director of Business and Economic Studies at PRI and the project director, first proposed that PRI undertake the *Index*. He is due our profound thanks for guiding the project every step of the way. Dr. Michael T. Maloney, the project's chief statistician, added his experience and academic rigor to the data collection and statistical analysis. I would also like to thank Dr. Eric Daniels for his brilliant introduction and Dr. Brent M. Eastwood for a new econometric application of the *Index*.

PRI's *U.S. Economic Freedom Index: 2008 Report* enjoyed support and encouragement from Dr. Edwin J. Feulner, president of the Heritage Foundation, and Tracie Sharp, president of State Policy Network. The Searle Freedom Trust made the project possible through a generous donation.

Special thanks also go to Steve Forbes, Tom Post, and Kurt Badenhausen for making the association between *Forbes* magazine and PRI on this project a reality and a success. Finally, I would like to thank Arthur B. Laffer for writing an insightful foreword.

PRI develops and promotes public-policy solutions that empower individuals to solve problems through voluntary association and exchange in free markets. Through its research, commentary, and outreach activities, PRI also educates the public. This volume represents a synthesis of PRI's objectives to research and to educate.

As PRI approaches its 30th anniversary, we are more committed than ever to promoting a wider discussion of key policy issues. Greater knowledge, more analytic thinking, and a national dialogue will contribute to reasoned and informed policy decisions. PRI remains fully committed to a prominent role in this process, and the *U.S. Economic Freedom Index* makes a valuable contribution.

Sally C. Pipes
President and Chief Executive Officer
Pacific Research Institute

Acknowledgements

Lawrence J. McQuillan spoke to several groups after the release of the 2004 edition of this report. He thanks participants and panelists at the Heritage Foundation in Washington, D.C.; Forbes headquarters in New York City; U.S. Small Business Administration conference in Washington, D.C.; and a PRI event in San Francisco for their discussions and constructive feedback.

Eric Daniels thanks: Bruce Yandle, Dean Emeritus and professor of economics emeritus, Clemson University, for his guidance and cheerful willingness to explain lucidly everything economics to me; Bobby McCormick, professor of economics and BB&T Scholar, Clemson University, and Bob Tollison, J. Wilson Newman Professor and BB&T Senior Fellow, Clemson University, for always providing insight and criticism into the nature of economic freedom and how we measure it; John A. Allison IV, chairman and CEO, BB&T Corporation, for his principled belief in and tireless action on behalf of economic freedom and the study of capitalism; and Brad Thompson, executive director of the Clemson Institute for the Study of Capitalism and BB&T Research Professor of Political Science, for his belief in my abilities, his support for my efforts, and his review of my draft.

Michael T. Maloney thanks professors McCormick, Tollison, and Yandle, who have been colleagues and coauthors over many years. And thanks go to my research assistant on this project, Arpita Biswas, who was a diligent worker and an imaginative thinker as we revisited the twists and turns of the notion of economic freedom.

The authors also thank Russell S. Sobel, professor of economics and James Clark Coffman Distinguished Chair in Entrepreneurial Studies, West Virginia University, Morgantown, West Virginia, for his formal review of this study. Any remaining errors or omissions are the sole responsibility of the authors.

The views and conclusions of the authors do not necessarily represent those of the board, supporters, or staff of the Pacific Research Institute.

Lawrence J. McQuillan
Michael T. Maloney
Eric Daniels
Brent M. Eastwood

Executive Summary

LAWRENCE J. MCQUILLAN, PH.D.

It has been said that liberty is a whole, and that to deny economic liberty is finally to destroy all liberty. Irrespective of our love for freedom, the authors of this report set out on an empirical journey, not a romantic one. Our goal is to measure economic freedom across the 50 U.S. states using the methodology of the 1999 and 2004 editions.

This report was first released in 1999 by John D. Byars, Robert E. McCormick, and T. Bruce Yandle, all of Clemson University, as *Economic Freedom in America's 50 States: A 1999 Analysis*, published by State Policy Network. This was the first index to measure economic freedom in the U.S. states and is still the most comprehensive assessment of economic freedom on the market today.

The report was updated in 2004 by Ying Huang, Robert E. McCormick, and Lawrence J. McQuillan as the *U.S. Economic Freedom Index: 2004 Report*, published by the Pacific Research Institute. The 2008 edition is an effort to update the 2004 edition using recent data that reflect changes in state policies since the previous edition.

It is hoped that by measuring economic freedom and studying its effects, people will gain a fuller appreciation of the important imprint it makes on the economic and political fabric of America and will encourage new state legislation that advances economic liberty.

WHAT IS ECONOMIC FREEDOM?

Economic freedom is the right of individuals to pursue their interests through voluntary exchange of private property under a rule of law. This freedom forms the foundation of market economies. Subject to a minimal level of government to provide safety and a stable legal foundation, legislative or judicial acts that inhibit this right reduce economic freedom. Government acts that advance this right increase economic freedom. This report focuses on state and local government actions as they relate to economic freedom; we do not judge the wisdom, merit, or purpose of specific government programs.

Our definition of economic freedom, along with the economics literature, guided our judgment as to which indicators were included in the full data set and how we scored each indicator's freedom effect.

THE METHODOLOGY AND INDICATORS

The methodology consists of four parts: (1) we compiled a set of indicators for economic freedom and from that we created five data sets; (2) these data sets were converted into 35 unique indexes using different weighting techniques; (3) we compared each index to the others in terms of its ability to explain, other things equal, human migration across the 50 U.S. states; and (4) the index with the greatest statistical link to migration was chosen as the best and was used to rank the U.S. states in terms of economic freedom.

Indicators

We gathered data on 143 indicators per state (data set 1, listed in appendix A). This snapshot included tax rates, state spending, occupational licensing, environmental regulations, income redistribution, right-to-work and prevailing-wage laws, and tort reform, to name just a few. Next, we cut some redundant indicators and averaged similar indicators for compactness (appendix B explains this process). This data parsing resulted in five different data sets (data sets 1–5).

Construction of Competing Indexes

For each of the five data sets, we calculated sector scores for each state. For example, data set 1 had 143 indicators. We put each indicator into one of five sectors: fiscal (51 indicators), regulatory (53), judicial (22), government size (7), and welfare spending (10). Each state's sector scores were calculated by ranking each indicator within a sector from 1 (most free) to 50 (least free). Then we averaged the indicator rankings within each sector to arrive at a sector score for each state. For example, data set 1 had 51 fiscal-sector indicators. A state's fiscal-sector score for data set 1 was calculated by ranking each fiscal indicator from 1 to 50 and then calculating an average ranking from these 51-indicator rankings. The same process was used to calculate scores for the other four sectors. This process was repeated for each of the five data sets.

After sector scores were calculated for each state over all five data sets, various sector-score weighting techniques were applied, ranging from assigning arbitrary weights to using statistical procedures such as principal components analysis to determine weights. Finally, weighted sector scores were added together to arrive at overall index scores for each state. The various combinations of data sets and weighting techniques yielded 35 unique indexes.

The Selection Criterion

These 35 indexes competed with each other to explain net population migration rates for the 50 U.S. states, from 2003 through 2007, using regression analysis. In the jargon of econometrics, the index we chose as best yielded the highest R-squared among those equations having an index coefficient t-value significant at the five-percent level or greater. This procedure selects the best, or final, index empirically, and it conforms to the proper statistical methodology for choosing among two or more equally plausible specifications.

Our criterion for selecting the best index among 35 indexes applies a market-based definition of freedom. We believe people want to be free: they strive and work to be free, and search out locations, governments, and situations where freedom reigns. Migration is the purest expression of individuals responding to differences in freedom, including economic freedom. We adopt a migration metric for economic freedom. If people are moving from one state to another, other things equal, we assert that this is a market-based response to differences in freedom. Ordinary people, voting with their feet, define freedom and that, in the end, is a clear advantage of our index: it is evaluated in the marketplace by where people decide to live.

The Best Index

The index having the greatest statistical link to migration was Index4A, constructed by weighting data set 4 using first principal components weights. The final indexes in 1999 and 2004 were also weighted using principal components. Principal components weighting has been used for years in political science. The technique weights each sector based on the degree of useful information (variation) in the sector, which enables finer distinctions among states to be clearly drawn.

The sector-score weights used to compute the final 2008 index score for each state were:

Index = (0.2313 × Fiscal Score) + (0.2159 × Regulatory Score) + (0.1894 × Judicial Score) + (0.1208 × Government-Size Score) + (0.2426 × Welfare-Spending Score)

The index score can range from 1 (most free) to 50 (least free), and state rankings were derived from the index scores. Appendix C provides point-by-point responses to critics and criticism of our methodology and the resulting index.

Not surprisingly, the net migration rate for the 20 freest states was 27.36 people per 1,000, while it was a shockingly low 1.17 people per 1,000 for the 20 most economically oppressed states. People are moving to the freest states and fleeing the least-free states as our market-based migration metric of economic freedom predicts. Index4A was statistically significant and negatively related to net migration, that is, a lower index rank implies more economic freedom, which leads to more net in-migration.

For every one-place index ranking improvement, a state's net migration per 1,000 people typically increased about one person. This means that in Michigan, for example, a one-spot improvement in its economic freedom ranking would result in a net increase of about 10,000 people to the state—much needed workers, consumers, investors, and entrepreneurs.

THE ECONOMIC FREEDOM RESULTS

Table 1 on page 11 presents the economic freedom scores and rankings for the 50 U.S. states in 2008. Kansas topped the 2004 list but dropped to 10 in 2008. South Dakota has assumed the lofty spot as the nation's most economically free state—it was 15 in 2004—followed closely by Idaho, Colorado, and Utah, all of which ranked well in 2004.

In contrast, Pennsylvania, California, New Jersey, Rhode Island, and New York bring up the rear. New York retains the dubious distinction of being the most economically oppressed state since 1999. Some states such as New York, Pennsylvania, and Utah have been remarkably stable since 1999—preserving their relative status quo for good or for bad. Other states have been on the move.

Turning first to the states that made the biggest improvements in relative economic freedom from 2004 to 2008, we found that South Dakota advanced 14 places, but even better were Minnesota, Illinois, and Wisconsin, which jumped 18, 19, and 20 places, respectively. There is an economic-freedom Renaissance in the Upper Midwest, and it is no accident that they are all neighbors—when one state reforms it puts pressure on its neighbors to improve or be at a competitive disadvantage for attracting people and capital.

In contrast to the advancing states, Texas fell 14 spots; Alaska, Delaware, and North Carolina each dropped 12 spots; and Arizona fell 10. These states are headed in the wrong direction.

TABLE 1. U.S. ECONOMIC FREEDOM INDEX, 2008

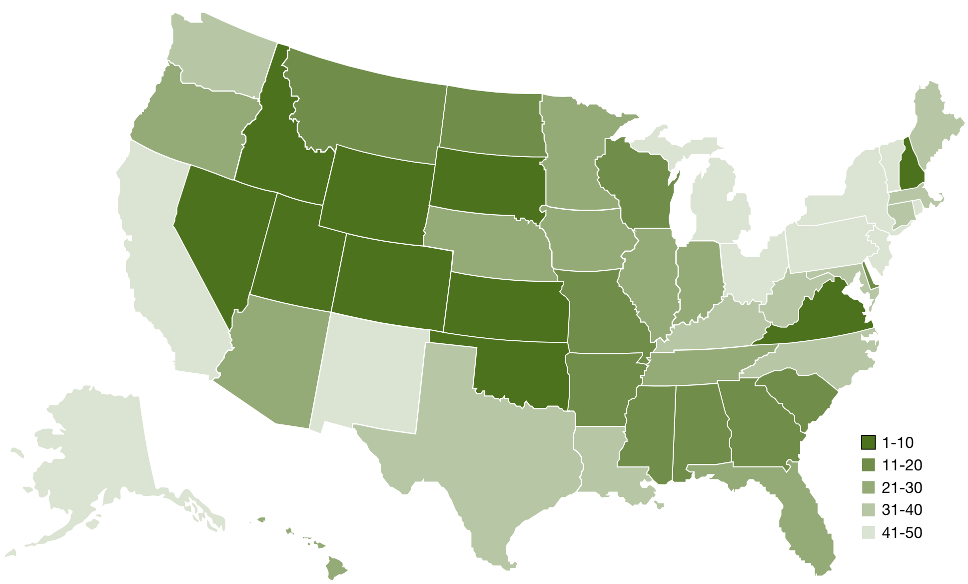
2008 Rank	State	Score	2004 Rank	1999 Rank
1	South Dakota	14.54	15	5
2	Idaho	14.81	4	1
3	Colorado	14.91	2	14
4	Utah	15.16	5	3
5	Wyoming	15.39	9	4
6	Nevada	15.70	12	20
7	Oklahoma	16.74	6	18
8	New Hampshire	17.07	7	6
9	Virginia	17.99	3	2
10	Kansas	18.06	1	10
11	Georgia	18.22	19	12
12	North Dakota	18.56	18	21
13	Montana	18.56	21	26
14	Arkansas	18.82	23	15
15	Missouri	18.90	10	13
16	Alabama	19.03	25	11
17	South Carolina	19.08	13	16
18	Wisconsin	19.15	38	37
19	Mississippi	19.28	28	9
20	Delaware	19.61	8	7
21	Arizona	19.78	11	25
22	Iowa	19.88	16	24
23	Indiana	19.92	14	22
24	Hawaii	19.92	35	39
25	Nebraska	19.93	20	23

2008 Rank	State	Score	2004 Rank	1999 Rank
26	Minnesota	20.92	44	43
27	Illinois	21.16	46	36
28	Florida	21.16	22	30
29	Tennessee	21.18	26	19
30	Oregon	21.24	29	41
31	Texas	21.32	17	8
32	Louisiana	21.36	40	31
33	Massachusetts	21.72	41	47
34	Maryland	21.73	27	35
35	Maine	21.81	30	42
36	North Carolina	21.87	24	17
37	Washington	21.92	31	40
38	West Virginia	22.55	32	32
39	Connecticut	22.66	48	46
40	Kentucky	22.71	39	29
41	New Mexico	22.82	37	28
42	Vermont	22.87	36	34
43	Michigan	23.08	34	27
44	Ohio	23.34	43	33
45	Alaska	23.38	33	38
46	Pennsylvania	23.88	45	45
47	California	23.89	49	44
48	New Jersey	23.94	42	48
49	Rhode Island	24.18	47	49
50	New York	27.39	50	50

Figure 1 below plots economic freedom from coast to coast, and distinct patterns emerge. The Great Plains and Rocky Mountain states, colored in darkest green, have the most economic freedom. New Hampshire persists in defying the pattern in the Northeast. Maybe there is something to their motto "Live Free or Die." Virginia stands as a citadel of economic freedom in the South, which overall performs fairly well, but likely not as well as most people would expect.

The states with the least economic freedom, colored in lightest green, are clustered in the Northeast plus Alaska, California, and New Mexico. Many of the nation's most densely populated states are also some of the least economically free. This is consistent with leading economic theories of the determinants of government intervention in markets. The Upper Midwest has improved significantly since 2004, the obvious exception being Michigan.

FIGURE 1. U.S. DISTRIBUTION OF ECONOMIC FREEDOM, 2008



In conclusion, the overseers of the Consumer Price Index, one of the oldest indexes in economics, write: "An index is a tool that simplifies the measurement of movements in a numerical series." The *U.S. Economic Freedom Index* is a tool for measuring relative economic freedom. Measurement is the first step to understanding, and understanding is required for reasoned discussion and sound reform. It is hoped that the *U.S. Economic Freedom Index* will ultimately contribute to sound policy reforms that preserve and advance economic freedom for all Americans.

Chapter 1. What Is Economic Freedom?

ERIC DANIELS, PH.D.

All eyes are opened, or opening, to the rights of man. The general spread of the light of science has already laid open to every view the palpable truth, that the mass of mankind has not been born with saddles on their backs, nor a favored few booted and spurred, ready to ride legitimately, by the grace of god.

—Thomas Jefferson, letter to Roger C. Weightman, June 24, 1826

Writing in anticipation of the 50th anniversary of America's Declaration of Independence, Jefferson optimistically believed that the example of American freedom and individual rights had opened the eyes of the world to the value of liberty. Nearly two centuries after Jefferson wrote, it is clear that America has indeed been the shining example of freedom for the rest of the world. Since Jefferson wrote, people around the globe have sought either to imitate the example of American freedom by replicating its institutions or to enjoy that freedom directly by migrating to the United States.

The example of American freedom is a powerful one. Nowhere else has the liberty of average citizens been greater, more secure, and more protected. Lovers of freedom have admired all its aspects, from our protection of religious conscience to our free elections, from our freedom of speech to our impartial judicial system to our ability to choose our own private associations and more. One of the most persuasive features of our freedom, of course, is America's high degree of economic freedom and the wealth and widespread abundance that has resulted from it.

Surveying the record of American productivity and prosperity is an inspiring task. In the space of just one-and-a-half centuries, American standards of living not only rose above those of most of the rest of the world, but they also rose beyond all expectation. Who among the most visionary forecasters of the mid-19th century could have imagined both the nearly unlimited economic opportunities available to Americans in the 21st century and the fact that these opportunities would be available to everyone who strived to achieve them without regard to race, creed, noble birth, or the accidents of fortune?

Our ancestors would scarcely recognize a world where jet airliners can whisk people from hemisphere to hemisphere in less than a day, where information about world events is available instantaneously, where corporations coordinate the economic activity of tens of thousands of employees around the globe (working in modern, climate-controlled high-rise offices, no less) while producing products to be sold to tens of millions, where diseases, plagues, and famines are a rare and tragic exception and not an accepted part of life.

Economic freedom not only correlates with economic growth and prosperity, but also is a direct cause of and necessary condition for it.

Even the richest American in the early 19th century would likely marvel at what is available to the average worker in 2008—the dizzying variety of food (from year-round fresh fruits and vegetables to exotic meats to instantly prepared meals-on-the-go), the comforts of life (from cheap clothing and transportation to modern housing and appliances), and the provision for optimal health (from MRIs and laser surgeries to organ transplants and universal vaccination), and beyond. That same 19th-century elite would be flabbergasted and stupefied by the fact that obesity—essentially, the consumption of too many calories and expenditure of too little physical labor—is a leading problem among the poor. In sum, by all economic measures, each successive generation of Americans enjoys indisputably better lives than previous ones. They work less and earn more, they can spend less on necessities and more on conveniences, and they live longer more pleasurable and more productive lives.[1]

It is not just migrants and imitators, however, who have noticed the superior material results that accrue to Americans as a result of their high levels of freedom. Over the past 20 years, scholars have increasingly directed attention to the problem of measuring different levels of prosperity around the world and correlating those observations with the differing levels of freedom.[2] Since 1995, the Heritage Foundation and the *Wall Street Journal* have produced the annual *Index of Economic Freedom*, which scores the nations of the world on a multi-factor formula that determines their level of economic freedom. Since 1996, the Fraser Institute and Cato Institute have teamed with an international network of free-market think tanks to produce and distribute the annual *Economic Freedom of the World* reports.

These studies' conclusions are unambiguous and clear—economic freedom not only correlates with economic growth and prosperity, but also is a direct cause of and necessary condition for it. Likewise, comparing these lists of the most economically free countries with the annual ranking of countries according to levels of political freedom and civil liberties by Freedom House, titled *Freedom in the World*, shows a direct link between levels of political and economic freedom.

ECONOMIC FREEDOM IN AMERICA

The United States as a nation has consistently scored in the top 10 of each of these studies, confirming the high degree of economic and political freedom enjoyed by Americans. Despite the high level of economic freedom in America generally, there is, nevertheless, a wide degree of variation in the United States itself. That uneven level of freedom forms the heart of our study and poses the central questions for it. How does economic freedom vary in the United States? What are the causes and the results of that variation?

Despite the high aggregate levels of economic freedom found in the United States, especially as compared with other nations, there is, nevertheless, a lack of uniformity in the distribution of that freedom. Within the United States, different groups of citizens experience different levels of economic freedom, often with drastic results. The lines that divide the levels of freedom in America are not based on class or race or sex. Instead, the origin of variation is found in the very nature of the American political compact—the federal nature of our republic. Because each of the 50 states has the sovereign power to direct local economic policy within its boundaries, there can be 50 different climates of economic freedom in the United States.

Despite the high level of economic freedom in America generally, there is, nevertheless, a wide degree of variation in the United States itself.

Supreme Court Justice Louis Brandeis once observed that the states could serve as "laboratories of democracy" by "try[ing] novel social and economic experiments." Brandeis hoped that the states could experiment with economic policy and thereby encourage more economic planning, more regulation, and more intervention on the socialist model.[3] His observation about the potential for the states to serve as laboratories is an apt one, even if the results are the opposite of what he might have expected. Instead of embracing the socialist model through state-level experimentation, Americans have demonstrated their belief in economic freedom by adopting the most basic strategy available to them—by doing what economist Charles Tiebout called "voting with their feet."[4] That is, given the freedom of Americans to move from jurisdiction to jurisdiction, we have found that Americans move away from states that impose regimes of less economic freedom in favor of those upholding more economic freedom.

SOME DEFINITIONS, ASSUMPTIONS, AND METHODS

At first blush, freedom can be a difficult concept to measure. Freedom, as a concept, is as old as written history itself. The earliest example of its written form dates to the 24th century B.C.[5] It initially seems quite simple—nearly everyone recognizes the visceral reaction when one's freedom is restricted. When people do or do not feel restrained or curtailed by some authority, there we might find a rough measure of the extent of their freedom. Yet this is too simplistic. We cannot rely merely on self-reporting to measure something as important as freedom. We need a more objective standard by which we can determine whether a society or a government upholds and protects freedom or restricts and denies freedom. In short, we need a set of criteria based on an explicit definition of economic freedom whereby we can measure objectively the levels of freedom state-by-state. Thus, we must begin our study with a clear definition of freedom.

Economic freedom is an application of political freedom. The most basic distinction at the heart of the concept of freedom is the distinction between *voluntary action* and *compulsion* or *coercion*. Where individuals can choose their thoughts and actions, where they are free from physical coercion, they are free. We operate from a negative definition of freedom—it means the *absence* of physical restraints that halt or forcibly redirect one's thoughts or actions. In the economic realm, this means that economic freedom is the freedom to produce and trade goods and services according to one's own judgment, unrestrained by the physical coercion or compulsion of others, including the government. One must be free to acquire, use, and dispose of private property. Individuals must be free to enter into voluntary contractual relationships. The root identification here is that no man has a moral right to stake a claim on the productive activity of another against his will.

The implementation of freedom in society requires the identification and protection of individual rights, including property rights, and the creation of a government restrained by the rule of law, with the sole purpose of that government being the protection of those rights. Thus, the proper functions of government are the provision of a realm of freedom for individuals to engage freely in economic transactions. To do this, a government must protect its citizens from bodily harm or physical coercion from criminals or hostile foreign powers. It must also provide a system of courts and laws that objectively define the rules of social interaction among individuals—that is, they must prohibit the initiation of force and place the retaliatory use of force under the control of a properly delimited government. Under such a system, individuals are free to exercise their rights in any manner that does not violate the rights of others. In the economic realm, this means that the government must provide a legal system whereby individuals' rights to property and contract are upheld and where disputes can be settled by law, not violence.

We define economic freedom as the right of individuals to pursue their interests through voluntary exchange of private property under rule of law.

In summary, we define economic freedom as the right of individuals to pursue their interests through voluntary exchange of private property under rule of law.

Thus, to make the measurement of different levels of economic freedom more objective requires that we specify a series of indicators and tie them to whether they advance or inhibit the proper functions of government in regard to an economy. In cases where an indicator leads, for example, to a greater ability of individuals to contract voluntarily with their fellow citizens, such a variable indicates a greater degree of freedom. Where an indicator leads to a diminished capacity for individuals to acquire, use, or dispose of their private property, for example, such a variable indicates a lesser degree of freedom.

This central insight has been the heart of a continuing project of studying and evaluating economic freedom in America. This *2008 Report* is the third edition of the *U.S. Economic Freedom Index*, which began in a 1999 study[6] by John D. Byars, Robert E. McCormick, and T. Bruce Yandle, and was revised in 2004 by Ying Huang, Robert E. McCormick, and Lawrence J. McQuillan.[7] It measures the differing levels of economic freedom on a state-by-state basis. By applying a methodology similar to the comparison of economic freedom between countries, we have endeavored to measure differing levels of economic freedom between states. That is, we have compiled criteria that illustrate a range of characteristics that indicate levels of freedom and that can vary between states. (A more complete discussion of the methodology is in chapter 2.)

WHAT OTHERS HAVE SAID

The literature on economic freedom has been growing significantly in recent years. Since the original publication of this index, scholars have focused more attention on the basic questions we investigate and their implications. Does economic freedom vary in significant ways in the United States? Can we observe a movement of people and human capital across state borders in response to differing levels of freedom? Are economic growth and personal income higher in states with more economic freedom?

In a wider conception, however, the literature on economic freedom was already well established and historically rich when this index was first published. Great minds throughout history have observed and remarked on the relationship between political and economic freedom and have arrived at the same conclusions. Our purpose here will be to survey their thought briefly and then review the modern literature.

The founder of modern economics, Adam Smith (1723–1790), was a strong proponent of free markets and free trade. His treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), is arguably the first investigation into how different levels of economic freedom affect economic growth and prosperity. Though Smith did not endeavor to index levels of freedom, his work makes a forceful argument that supports our conception of economic freedom. Smith believed that our "propensity to truck, barter, and exchange one thing for another" would lead to "general opulence."[8] Such a system, Smith believed, required that "every man, as long as he does not violate the laws of justice, [be] left perfectly free to pursue his own interest his own way."[9]

The French classical economist Jean-Baptiste Say (1767–1832), writing in the early 19th century, improved on Smith's formulations and extended his analyses. Say made the connection between a limited government and economic productivity explicit in his *Treatise on Political Economy* (1803). Say recommended comparing the economic situation of the nations of Western Europe with those of Asia and Africa with an eye to their government. "[O]f all the means by which a government can stimulate production," he noted, "there is none so powerful as the perfect security of person and property, especially from the aggressions of arbitrary power. This security is of itself a source of public prosperity that more than counteracts all the restrictions hitherto invented for checking its progress. Restrictions compress the elasticity of production; but want of security destroys it altogether."[10]

Influenced by both the classical economists and Enlightenment political philosophers such as John Locke, the American Founders also articulated a defense of economic freedom as a means of securing prosperity and happiness. As Jefferson noted in 1785, "I think all the world would gain by setting commerce at perfect liberty."[11] The Founding generation believed that property rights and economic freedom were absolutely essential to freedom and liberty more generally. "The right of property is the guardian of every other right," explained Arthur Lee, "and to deprive a people of this, is in fact to deprive them of their liberty."[12]

In their disputes with Britain during the Revolutionary Era, the Founders contested the mother country's excessive taxation, her invasive trade regulations, her bounties and subsidies for favored industries, her prohibition of certain trades, and in general, her attempt to control and manage an economy that they believed should be left free.[13]

The best analysis of the relationship between economic freedom, prosperity, and government came from the pen of James Madison in an essay he published in 1792, titled, simply, "Property."[14] The proper end of government, Madison noted, "is to protect property of every sort; as well that which lies in the various rights of individuals, as that which the term particularly expresses." The crucial point that Madison made is that there is a deep connection between economic rights and all of our other rights. As he noted, "as a man is said to have a right to his property, he may be equally said to have a property in his rights." There was, for Madison, no possibility of happiness, prosperity, or security under a government that did not protect both economic and political rights equally. For Madison, these were mutually necessary and mutually reinforcing.

This vital connection between the economic and political rights of the individual is a theme that 20th-century thinkers have picked up and advanced in important ways. The free-market economists Friedrich von Hayek and Ludwig von Mises each observed that economic freedom can only exist where individuals have the right to determine for themselves the course of their own thoughts and actions. "Economic control is not merely control of a sector of human life which can be separated from the rest," Hayek noted in 1944, "it is the control of the means for all our ends. And whoever has the sole control of the means must also determine which ends are to be served, which values are to be rated higher and which lower—in short, what men should believe and strive for."[15] Government, Mises observed, "is a guarantor of liberty

Government, Mises observed, "is a guarantor of liberty and is compatible with liberty only if its range is adequately restricted to the preservation of what is called economic freedom."

and is compatible with liberty only if its range is adequately restricted to the preservation of what is called economic freedom."[16]

These economists shared with their colleague Milton Friedman a belief that economic freedom and political freedom went hand in hand, and that such a unity of liberty was the only means of achieving prosperity. "Freedom in economic arrangements," Friedman wrote in 1962, "is itself a component of freedom broadly understood, so economic freedom is an end in itself. . . . [but] economic freedom is also an indispensable means toward the achievement of political freedom."[17] He believed that "competitive capitalism—the organization of the bulk of economic activity through private enterprise operating in a free market" is "a system of economic freedom and a necessary condition for political freedom."

Among the thinkers who advocated economic freedom in the 20th century, philosopher Ayn Rand stands out as a staunch champion of that cause. In her novels and non-fiction works, Rand explained the crucial relationship between economic and political freedom as being rooted in the requirement of human beings to have freedom of thought and action. "*Intellectual* freedom cannot exist without *political* freedom," she noted in 1961, "[and] political freedom cannot exist without *economic* freedom; *a free mind and a free market are corollaries.*"[18]

Economic freedom and prosperity, happiness, development, and growth are maximized under a system of freedom, which means a system of capitalism.

Rand also emphasized the crucial distinction between freedom as a political concept and freedom as an economic concept. Politically, Rand defined freedom as "freedom from government coercion." It does not mean, she continued, "freedom from the landlord, or freedom from the employer, or freedom from the laws of nature which do not provide men with automatic prosperity."[19]

Rand argued that the key to human prosperity was the protection of individual rights. Since the reasoning mind, she argued, is the source of our ability to produce material values, and since its use must remain free to follow its conclusions, the political system necessary for prosperity was capitalism, the only system that fully and uncompromisingly protects man's rights. "History and, specifically, the unprecedented prosperity-explosion of the nineteenth century," Rand noted, gave a dramatic illustration that "capitalism is the only system that enables men to produce abundance—and the key to capitalism is individual freedom."[20]

In all, these thinkers illustrate the fact that economic freedom and prosperity, happiness, development, and growth are maximized under a system of freedom, which means a system of capitalism.

RECENT INVESTIGATIONS OF ECONOMIC FREEDOM

The literature on economic freedom is a growing and diverse one. A brief search of the EconLit database indicates that more than 350 articles investigate some aspect of the question of how economic freedom interacts with other factors. Although much of this literature has focused on the international context, an encouraging trend is the appearance of more investigation of economic freedom in the United States.

For scholars who believe in the value of competition, one of the highlights of recent years has been the appearance of competing indexes of economic freedom that focus on a state-by-state comparison instead of just international ones. Since 2002, the Fraser Institute has published *Economic Freedom of North America*, which includes each of the American states and Canadian provinces in their analysis.[21] In 2007, the American Legislative Exchange Council published *Rich States/Poor States: ALEC-Laffer State Economic Competitiveness Index*.[22] Although both of these studies adopt a different set of variables to examine the levels of economic freedom, readers interested in the topic of economic freedom in the United States now have three richly researched sources to consider.

One of the areas where promising work remains to be done is the investigation of different applications of the basic conclusion of our study, that different levels of economic freedom in the states affect economic performance and outcomes. Recent studies have investigated the effects of different levels of economic freedom among the states on net business formation,[23] levels of interstate migration,[24] human capital migration (also known as "brain drain"),[25] entrepreneurship,[26] and income inequality.[27] These studies have all illustrated the vital role that economic freedom plays in determining positive economic outcomes, but more research needs to be done.

A recent study and policy analysis of West Virginia edited by Russell S. Sobel, *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It*,[28] investigates the reasons why West Virginia consistently ranked near or at the bottom of average income and why its policies have been hostile to capitalism. The particular genius of the approach of *Unleashing Capitalism* is the observation that residents of West Virginia have not just ranked lower in average income across the state when compared to other states, but that residents in the counties of West Virginia that lie immediately across the border from Virginia or Kentucky have lower incomes than people who live in almost identical environments.

Economic freedom is the key to growth, development, happiness, and well-being, indeed to supporting the very system of political freedom itself. This is why it is so important to measure economic freedom.

In addition to income levels, Sobel and his co-authors illustrate the different levels of economic growth and investment that appear to halt magically at the West Virginia border. By applying the fact of varying economic freedom across state boundaries, Sobel et al. have confirmed that incomes are lower where economic freedom is lower. The dramatic illustrations of *Unleashing Capitalism* recall the vivid differences that Julian Simon illustrated between the free and unfree peoples of South Korea and North Korea, or West Berlin and East Berlin, or Taiwan and China—what Andrew Bernstein has called "the great laboratories of capitalism and socialism."[29]

In sum, scholars are beginning to produce a rich literature describing the empirical connection between economic freedom and various measures of economic performance. Recent work has even suggested that scholars can measure the higher levels of aggregate happiness that accrue to those who experience higher levels of freedom.[30] As more scholars work in the field, we are confident that the details will bear out the more general conclusions that we draw here in this index—that economic freedom is the key to growth, development, happiness, and well-being, indeed to supporting the very system of political freedom itself. This is why it is so important to measure economic freedom.

The next chapter explains the methodology and indicators used to create the economic freedom ranking across the 50 U.S. states.

Chapter 2. The Methodology and Indicators

LAWRENCE J. MCQUILLAN, PH.D.,
AND MICHAEL T. MALONEY, PH.D.

The *U.S. Economic Freedom Index* was the first index to measure economic freedom in the 50 U.S. states beginning in 1999. It is also the most comprehensive assessment of economic freedom on the market today. Our goal is to measure economic freedom in the 50 U.S. states using the methodology from the 1999 and 2004 editions but applying up-to-date data that reflect changes in state policies since the previous edition.

The *U.S. Economic Freedom Index* was the first index to measure economic freedom in the 50 U.S. states beginning in 1999. It is also the most comprehensive assessment of economic freedom on the market today.

We collected and ranked 143 indicators comprised of 209 underlying variables from five sectors for each state. Indicator data are the actual observations of specific laws or freedoms. These data are generally of two types.

First, we might have a continuous indicator that is either ordinal or cardinal. Minimum-wage laws are an example of a continuous cardinal indicator. The higher the minimum wage, the greater the infringement on the right to contract and the less economic freedom. Second, we might have a discrete indicator. The existence of a law requiring individuals to attend public school would be a zero-one indicator, where states with a law requiring public education would be coded with a one—less freedom. Some states might have licensing restrictions on some trades or services, say barbers. Here the indicator is either off or on, 0 or 1. In this example, the indicator 1 would denote regulation of barbers and imply a restriction on the right to contract and less economic freedom for individuals in that state.

There is unavoidable redundancy in some indicators, but this is only an issue to a limited extent. Multiple indicators, just like mean, variance, skewness, and kurtosis in statistics, pick out minor nuances of data and act to stress the little things that are different. In the end, we do not think that redundancy creates a problem for our measurement. Indeed, since we are using these indicators to rank the states ordinally, it is not an issue at all. Appendix A lists the indicators by sector: fiscal, regulatory, judicial, government size, and welfare spending.

After the indicator data were collected and put into sectors, they were scored and ranked. The state with the freest indicator was assigned the rank of 1 (the most freedom). The state with the least-free indicator was ranked 50. Some indicators are either on or off, such as regulation of barbers or embalmers. In these cases, we assigned a value of 1 to the states without regulation; the other states received a rank equal to 1 plus the number of the states without license. So if 16 states do not require embalmers to be licensed and 34 do, 16 states are ranked 1 and 34 states are ranked 17.

In other cases, there might be a license required to practice an occupation in one state based on a lengthy education or training program, a certificate required in another state based on filling out a form and paying a required fee and waiting for the certificate, and no regulations in a third. Here we assigned a score of 50 for the licensed states, 25 for the certificate states, and 1 for the unregulated states. There are a few cases where we used rankings created by others. An example would be "strictness of gun laws." Here we took rankings from the relevant index.

After the indicators were grouped into sectors, ranked, and averaged for each state, subjective and objective sector-weighting methods were applied to build 35 unique indexes with a separate overall score for each state. These 35 indexes competed with each other to explain net population migration rates for the 50 U.S. states from 2003 through 2007. The explanatory capacity of each index was tested using regression analysis and the best index was chosen as the final index.

THE SECTORS

For the purpose of the index, we assumed that all relevant economic-freedom indicators in every state are greater than the levels needed for a "minimal state" to provide the rule of law necessary for high levels of economic freedom to flourish. As a result, for example, jurisdictions that tax relatively more are less economically free.

THE FISCAL SECTOR (51 INDICATORS)

Taxation is a government infringement on free markets and private property rights. Taxes alter markets by changing the relative prices of goods and services and by generally creating deadweight losses to social welfare. Taxes alter not only people's current choices, but also their future choices. Additionally, legal and illegal tax-avoidance activities consume resources.

Taxes, therefore, have tremendous direct and indirect effects on the free use of individual wealth. We collected data on the most recent revenues and rates of taxation. The higher the tax rates and tax revenues, the more that government is violating economic freedom.

THE REGULATORY SECTOR (53 INDICATORS)

Government regulation imposes restrictions on people's behavior. Governments enact regulations to maintain social order or achieve certain stated purposes, usually touted as promoting the general welfare. This report is not concerned with the purpose of regulations, but with the reality that they affect the free allocation of private resources, thus reducing economic freedom. Examples include mandatory regulations on labor, education, and the environment, to name a few. There are also a few regulations that preserve and extend economic freedom such as right-to-work laws.

THE JUDICIAL SECTOR (22 INDICATORS)

Ideally, the judiciary is "extra-market," meaning it is outside the market realm and acts as an impartial referee to resolve disputes arising from market interaction. The judiciary provides the "rule of law" necessary for economic freedom to flourish—these are the restraints and restrictions we place on our own freedoms ultimately to achieve a safer and more prosperous civil society.

But in reality, the judiciary is not always effective and rarely perfect. An inappropriate system might encourage frivolous lawsuits and expose individual assets to a higher risk of unreasonable confiscation.[31] The medical-liability crisis is an example.

According to the American Medical Association, the nation's medical-liability system is broken. Escalating jury awards and the high cost of defending lawsuits are driving liability premiums through the roof. In response, physicians are choosing to limit services, retire early, or move to states with reforms. As they see it, a crisis exists in many states and it threatens patient care in states without liability reform.

Access to the court system is a basic freedom under the rule of law. Unbridled economic punishment is not. Access to the courts to redress contract and tort grievances is a basic economic freedom. Is a courthouse with a wide-open door, however, a free place? Clearly, more empirical guidance is needed here. We include as an indicator whether the state is in a health-care crisis to show how adversely the judicial system can affect economic freedom.

Common provisions of state laws on medical-liability reform such as mandatory minimum liability insurance and damage caps are included. Minimum insurance requirements are a restriction imposed by governments on physicians, but as one of the liability-reform measures, we categorize it as extra-market and part of the rule of law that provides the foundation for market exchange and economic freedom.

In states with mandatory insurance, physicians found negligent generally have less risk that their assets will be depleted, and injured parties are assured payment of damages. Damage caps can be an effective way of stabilizing liability premiums by prohibiting excessive damage awards. It is assumed, therefore, that states with these statutes are freer than those without.

We also include more indicators on tort reform, the number of lawyers, compensation for judges and attorneys general, and judges' terms. It is not easy to interpret these indicators, in part because the judiciary is structured to divorce judicial action from economic incentives. We assume states with tort reform are freer than states without tort reform; and states with fewer lawyers, shorter terms, and higher compensation enjoy more economic freedom.

THE GOVERNMENT-SIZE SECTOR (7 INDICATORS)

Without enforcement machinery, a government tax code or regulation is just so many words on paper. The government can create all the rules and regs it wants to, but little economic freedom is lost without oversight and enforcement. We include the government-size sector as a measure of the state government enforcement machinery (people, capital, and money) used to enforce government infringements on economic freedom.

Without enforcement machinery, a government tax code or regulation is just so many words on paper.

The proper role of government is to enforce rights through the rule of law. We assume that every state has instituted more government than is required to provide this minimal state to enforce the rule of law. A larger government size, therefore, implies less economic freedom. We include indicators such as the number of government units and the number of government employees as indicators of government size.

THE WELFARE-SPENDING SECTOR (10 INDICATORS)

Welfare programs are intended to improve the living standards of some people by transferring money from one group to another. We singled out this government spending as its own sector because we believe it is the most egregious violation of economic freedom: resources are forcibly transferred from one private individual to another without anything given in exchange and no tangible public asset produced. We include indicators measuring expenditures or payments for Food Stamps, Social Security, Medicare, and other programs.

We believe it is the most egregious violation of economic freedom.

Note that we are not concerned about the wisdom, merit, or purpose of these government programs. Our concern is that they are financed by the involuntary transfer of private assets; therefore, they reduce economic freedom. The indicators we chose measure how much money is redistributed through direct transfers, and reflect the degree of lost economic freedom.

ABOUT THE DATA

We collected data on each indicator for each of the five sectors. We used the most recent data available for each indicator. From these, sector scores were calculated. These were then used to compute various indexes, which were evaluated and one chosen as best. Details of this process are reported in this section. For the sake of continuity, the indexes were constructed using the same methodology as the 1999 and 2004 editions. Indicator data were collected for each state across 143 indicators.

Appendix A lists the indicators by sector. The data are available at http://special.pacificresearch.org/pub/sab/entrep/2008/Economic_Freedom/.

THE CATEGORIZING AND WEIGHTING

As noted above, data were collected and put into five sectors: fiscal, regulatory, judicial, government size, and welfare spending. We chose to group the indicators by sector rather than treating every indicator separately, since this method allows us to see quickly in which areas a state is strong or weak. Sector scores were created by averaging the indicator ranks (1–50) in each sector for each state. The regulatory and fiscal sectors included 53 and 51 indicators, respectively, while the remaining three sectors consisted of fewer indicators.

Next, five data sets were created. They differ from each other in that some redundant indicators were dropped and some indicators were grouped into subcategories to create cleaner, more refined data sets. A detailed description of these data sets is in appendix B.

The judgment involved in this process is subjective, but the purpose is to weight sectors and construct indexes in many different ways since there is no absolutely correct method. Sector scores are calculated using each of the five data sets, and weighted using various subjective and objective techniques. The final index was built by weighting the five sector scores and adding them together.

A total of 35 unique indexes were created. The best index was selected based on an objective criterion: ability to explain net population migration rates in the 50 U.S. states from 2003 through 2007.

THE SUMMARY DETAILS OF REDUNDANCY PARSING

We chose to eliminate some nearly duplicate indicators. For example, there is a strong redundancy in tax rates and total taxes. We parsed some obvious duplicate indicators across sectors into a more concise and less duplicative representation of state economic freedom.

Our procedure for eliminating redundancy was empirical and involved a step function. First, we eliminated some redundancy by averaging similar indicators within a group, usually two or three, but sometimes more. Starting from what we call the "full house," data set 1 with 143 indicators, we constructed data set 2 by cutting and averaging some indicators, reducing the number from 143 to 127. For data set 3, only 47 indicators were used. Most of the indicators are averages of groups of indicators that are closely related.

Data set 4 is a variant of data set 2 with one important distinction. In a Friedmanian sense, it can be argued that tax rates and government expenditures are better measurements of the loss of economic freedom than are tax revenues.

As this argument goes, government expenditures are a better measure of the control or intervention by the government in the economy than tax receipts because the government can borrow money, which implicitly taxes future generations, if not the current one, and results in less capital for private-sector investment. So expenditures are a more complete measure of government control over the economy than tax revenues.

Government expenditures are a better measure of the control or intervention by the government in the economy than tax receipts because the government can borrow money.

Nevertheless, current tax rates are important because they directly affect behavior by changing relative prices. So data set 4, which leaves out tax revenues in favor of government expenditures and tax rates, is based on the argument that these indicators give a truer picture of the control by government over the economy.

Hence, where there were suitable alternative indicators, indicators of the magnitude of tax revenue were replaced. Data set 5 is constructed from data set 4 using the same method that was applied to data set 2 to generate data set 3. The details are reported in appendix B.

Data set 4 turned out to be the best and most appropriate set of indicators, consisting of 116 indicators constructed by engaging in the following steps:

- Several redundant indicators dealing with sales, excise, license, and corporate and personal income taxes were removed.
- Since there is a high correlation between taxes and expenditure, few of the state and local expenditure indicators were not used.
- The number of indicators in the fiscal sector was thus collapsed from 51 to 35.
- In the regulatory sector, occupational-licensing and education-requirement indicators for each profession were averaged into three indicators instead of considering them separately.
- The regulatory sector ended up having 50 indicators.
- In the judicial sector, multiple indicators on each of judges' salaries, term lengths, and selection methods were averaged and reduced.
- Similarly, medical-liability reform was reduced from three to one.
- In total, the judicial sector was compressed to 17 indicators.
- No new indicators were constructed for the government-size sector and welfare-spending sector. They were constructed with six and eight indicators, respectively.

THE FINAL INDEX CONSTRUCTION AND SELECTION

Using each data set, we constructed each index using the following process: first, sector scores were computed for each state by adding together the ranks it earned on each indicator within a sector and calculating an average sector score. Second, the overall index score was created by adding together the weighted sector scores. We used both subjective and objective methods to weight the sector scores. Besides giving arbitrary weights (for instance, equal weighting), two statistical methods were used.

The first regressed the net population migration rate on the five sector scores to see their relative significance in explaining population movement. The weight for each sector is the ratio of its coefficient to the sum of all five coefficients. The coefficients for the five sectors were each negative, suggesting less freedom (higher scores) in any of the five policy areas is connected with less in-migration.

The second statistical method for weighting the sector scores was principal components analysis, a weighting technique used for years in political science. A principal component is a linear combination of the explanatory variables (in our case the sector scores) that captures as much of the variation across states in the scores as possible, subject to a "normalization condition."

Principal components analysis extracts from the data the true sources of variation among the states by more heavily weighting those sectors that varied most, that is, those sectors where the states differed most. The analysis gave greater weight to sectors that had more useful information relative to sectors with less useful information. By giving greater weight to sectors with more variability, finer distinctions were clearly drawn since states differ most in those sectors.

By giving greater weight to sectors with more variability, finer distinctions were clearly drawn since states differ most in those sectors.

The analysis assigns coefficients to each sector score so that a principal component is created. There are as many principal components as there are explanatory variables (a first principal component, a second principal component, etc.; five in our case). The coefficients are chosen to maximize the variance of each respective principal component, capturing as much of the total variation in the explanatory variables (sector scores) as possible. The normalization condition applied to the coefficients is that the sum of their squares must sum to one. The coefficients are divided by their sum to create sector weights that also sum to one.

Each principal component is uncorrelated with the others (mutually orthogonal), and each succeeding principal component accounts for as much of the variation in the explanatory variables as possible that was unaccounted for by preceding principal components. The variance of the first principal component usually captures the major portion of the total variation of the explanatory variables.[32]

Armed with these many differently weighted indexes using different data sets, we chose as the best metric of economic freedom the index with the greatest statistical link to net population migration rates for the 50 U.S. states.[33] Migration rates are the sum of the net number of people migrating into a state from 2004 through 2007, divided by the state's population in 2003.

In the jargon of econometrics, the index we chose as best yielded the highest R-squared among those equations having an index coefficient t-value significant at the five-percent level or greater. This procedure selects the best, or final, index empirically, and it conforms to the proper statistical methodology for choosing among two or more equally plausible specifications.

The best index was Index4A, constructed by weighting data set 4 using the first principal components weights. The final indexes in 1999 and 2004 were also weighted using principal components.

Not surprisingly, the net migration rate for the 20 freest states was 27.36 people per 1,000, while it was a shockingly low 1.17 people per 1,000 for the 20 most economically oppressed states. People are moving to the freest states and fleeing the least-free states as our market-based migration metric of economic freedom predicts. Index4A was statistically significant and negatively related to net migration, that is, a lower index rank implies more economic freedom, which leads to more net in-migration.

People are moving to the freest states and fleeing the least-free states as our market-based migration metric of economic freedom predicts.

For every one-place index ranking improvement, a state's net migration per 1,000 people typically increases about one person. This means that in Michigan, for example, a one-spot improvement in its economic freedom ranking would result in a net increase of about 10,000 people to the state—much needed workers, consumers, investors, and entrepreneurs.

The sector-score weights used to compute the final 2008 index score for each state were:

Index = (0.2313 × Fiscal Score) + (0.2159 × Regulatory Score) + (0.1894 × Judicial Score) + (0.1208 × Government-Size Score) + (0.2426 × Welfare-Spending Score)

These sector weights were similar to the sector weights that we found by using regression analysis directly on the sector scores.

The principal components' weights are themselves revealing. The fiscal, regulatory, and welfare sectors are nearly equally weighted. The judicial sector and the government-size sector carry less weight.

We used net population migration rates for the 50 U.S. states to select the final index because freedom is best viewed through the eyes of the beholder.

The approach taken here appears agnostic on the surface, but is actually a market-based definition. Our technique creates freedom indexes and then searches across them, finding the one that best maps into actual human behavior that is arguably driven by freedom.

If we see people climbing the Berlin Wall, swimming the Florida Straights, or applying for visas to live in the United States, we can, to some extent, claim that these people are "in search of freedom." Therefore, we adopted a migration metric for economic freedom. If people are moving from one state to another, other things equal, we assert and believe that this is a market-based response to differences in freedom and perhaps the purest expression of individual responses to differences in economic freedom.

As President Ronald Reagan said, and we believe it is the essence of the correct way to measure freedom using market tests: "Mr. Gorbachev, open this gate! Mr. Gorbachev, tear down this wall!" What else could Reagan have meant except freedom is the right to live where one wishes. People define freedom by voting with their feet.

In summary, our method uses the classical approach of using our judgment and the scholarly literature to compile a list of relevant indicators of economic freedom. These indicators are then converted into a number of indexes using various techniques. We then compare each index to the others in terms of its ability to explain human migration, other things the same. The best index is then used to rank the U.S. states in terms of economic freedom.

Our index offers the clear advantage that it is evaluated in the marketplace, by people's actual decisions of where to live. Our technique works and measures what we want it to: relative economic freedom as seen through the eyes of ordinary people. We note that this approach is Rawlsian in nature.[34] If a system is just and fair, and people value these things, as we believe they do, then migration is a proper measure of one social implication of differences in economic freedom. [Appendix C provides point-by-point responses to critics and criticism of our methodology and the resulting index.]

Our index offers the clear advantage that it is evaluated in the marketplace, by people's actual decisions of where to live. Our technique works and measures what we want it to: relative economic freedom as seen through the eyes of ordinary people.

The next chapter presents the results of the statistical analysis and discusses in depth the economic freedom rankings across the 50 U.S. states.

Chapter 3. The Results

MICHAEL T. MALONEY, PH.D.,
LAWRENCE J. MCQUILLAN, PH.D.,
AND ERIC DANIELS, PH.D.

States are not homogeneous within their own borders with respect to economic freedom.

Table 2 on page 34 reports each state's unweighted sector scores and rankings (for reference, the order of the sector weights, from heaviest (1) to lightest (5), is in parenthesis). The table reveals that states are not homogeneous within their own borders with respect to economic freedom. For example, Alabama ranks second in the fiscal sector, but quite low in the government-size sector and the welfare sector, 36 and 27, respectively. Wisconsin ranks very poor in the fiscal sector, 49, but it does much better in government size, 9.

TABLE 2: SECTOR SCORES AND RANKINGS, 2008

	Fiscal (2)		Regulatory (3)		Judicial (4)		Government Size (5)		Welfare Spending (1)	
State	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Alabama	17.83	2	12.22	15	12.07	19	29.29	36	26.56	27
Alaska	24.63	30	12.89	24	12.07	19	26.57	31	38.78	49
Arizona	21.46	14	15.98	43	14.67	32	20.43	11	25.22	23
Arkansas	20.54	10	13.78	31	15.73	37	21.86	13	22.56	17
California	25.63	35	17.76	48	15.93	38	23.29	18	34.22	46
Colorado	19.17	6	12.47	18	10.67	11	16.71	6	15.44	4
Connecticut	29.11	45	13.27	29	17.47	43	21.86	13	29.33	35
Delaware	27.43	41	10.44	4	23.33	50	15.29	3	19.56	13
Florida	28.54	44	17.36	45	11.80	15	25.29	26	22.78	18
Georgia	18.57	3	10.76	6	11.93	17	30.71	38	23.22	20
Hawaii	21.34	13	14.49	38	14.87	34	16.14	5	29.22	33
Idaho	23.74	26	11.62	10	8.27	3	20.00	10	11.67	2
Illinois	27.17	40	11.18	8	14.33	30	28.29	34	26.11	26
Indiana	20.86	11	15.31	39	13.73	25	24.71	22	25.56	25
Iowa	23.06	23	12.44	17	11.73	14	29.14	35	25.22	23
Kansas	22.66	20	11.82	13	11.87	16	31.57	40	17.33	8
Kentucky	23.09	24	13.4	30	13.93	28	32.43	42	32.67	43
Louisiana	24.11	28	19.09	50	14.80	33	22.86	16	25.11	22
Maine	25.60	33	12.6	20	15.53	36	22.43	15	31.00	41
Maryland	28.11	43	13.22	28	19.87	47	25.29	26	22.89	19
Massachusetts	25.89	36	10.2	3	22.60	49	23.00	17	26.67	28
Michigan	25.60	33	13.84	32	14.33	30	33.00	45	30.78	40
Minnesota	26.20	38	14.24	36	10.13	10	27.86	33	26.78	29
Mississippi	18.94	4	11.82	13	8.33	4	34.00	48	27.44	30
Missouri	20.26	9	14.24	36	11.67	13	32.86	44	20.44	14
Montana	22.66	20	9.956	1	9.53	8	19.71	8	28.78	32
Nebraska	29.63	46	13.07	25	13.80	26	20.86	12	21.11	15
Nevada	26.71	39	11.64	11	10.07	9	10.71	1	15.67	5
N. Hampshire	19.77	8	12.71	22	13.07	21	24.57	21	17.78	9
New Jersey	31.46	50	16.64	44	13.067	21	32.571	43	27.44	30
New Mexico	22.26	18	15.47	41	18.2	46	23.857	19	33	44
New York	30.17	48	14.04	35	17.467	43	37.714	50	39.22	50
N. Carolina	26.09	37	13.89	33	16.267	39	31.714	41	24.44	21
N. Dakota	19.43	7	11.51	9	7.6667	1	25.143	25	29.22	33
Ohio	29.94	47	15.62	42	8.2	2	33.714	47	30.56	39
Oklahoma	21.51	15	12.4	16	8.4	5	29.714	37	16.11	6
Oregon	25.43	32	15.33	40	9.40	7	23.86	19	30.44	38
Pennsylvania	27.69	42	12.56	19	18.13	45	33.14	46	30.22	37
Rhode Island	23.83	27	17.56	46	21.80	48	13.57	2	37.56	48
S. Carolina	22.80	22	13.89	33	13.93	28	25.00	24	21.22	16
S. Dakota	16.57	1	10.89	7	12.00	18	17.14	7	16.56	7
Tennessee	23.69	25	10.64	5	13.60	24	26.29	29	31.56	42
Texas	24.51	29	18.67	49	13.87	27	37.43	49	18.44	10
Utah	20.86	11	10.13	2	8.73	6	15.57	4	19.00	12
Vermont	24.66	31	12.87	23	17.00	42	25.71	28	33.22	45
Virginia	22.09	17	12.67	21	16.93	41	31.14	39	13.11	3
Washington	21.91	16	11.67	12	13.47	23	27.43	32	34.89	47
W. Virginia	22.31	19	17.56	46	16.73	40	26.29	29	29.89	36
Wisconsin	31.37	49	13.11	27	11.13	12	19.86	9	18.78	11
Wyoming	19.09	5	13.07	25	15.47	35	24.71	22	9.22	1

TABLE 3. U.S. ECONOMIC FREEDOM INDEX, 2008

2008 Rank	State	Score	2004 Rank	1999 Rank
1	South Dakota	14.54	15	5
2	Idaho	14.81	4	1
3	Colorado	14.91	2	14
4	Utah	15.16	5	3
5	Wyoming	15.39	9	4
6	Nevada	15.70	12	20
7	Oklahoma	16.74	6	18
8	New Hampshire	17.07	7	6
9	Virginia	17.99	3	2
10	Kansas	18.06	1	10
11	Georgia	18.22	19	12
12	North Dakota	18.56	18	21
13	Montana	18.56	21	26
14	Arkansas	18.82	23	15
15	Missouri	18.90	10	13
16	Alabama	19.03	25	11
17	South Carolina	19.08	13	16
18	Wisconsin	19.15	38	37
19	Mississippi	19.28	28	9
20	Delaware	19.61	8	7
21	Arizona	19.78	11	25
22	Iowa	19.88	16	24
23	Indiana	19.92	14	22
24	Hawaii	19.92	35	39
25	Nebraska	19.93	20	23
26	Minnesota	20.92	44	43
27	Illinois	21.16	46	36
28	Florida	21.16	22	30
29	Tennessee	21.18	26	19
30	Oregon	21.24	29	41
31	Texas	21.32	17	8
32	Louisiana	21.36	40	31
33	Massachusetts	21.72	41	47
34	Maryland	21.73	27	35
35	Maine	21.81	30	42
36	North Carolina	21.87	24	17
37	Washington	21.92	31	40
38	West Virginia	22.55	32	32
39	Connecticut	22.66	48	46
40	Kentucky	22.71	39	29
41	New Mexico	22.82	37	28
42	Vermont	22.87	36	34
43	Michigan	23.08	34	27
44	Ohio	23.34	43	33
45	Alaska	23.38	33	38
46	Pennsylvania	23.88	45	45
47	California	23.89	49	44
48	New Jersey	23.94	42	48
49	Rhode Island	24.18	47	49
50	New York	27.39	50	50

Keeping in mind the weights used for the overall index, these results suggest that, for example, Virginia is better positioned than West Virginia in terms of economic freedom. Sector scores warrant additional scrutiny later. First, we turn to the overall U.S. economic freedom scores and rankings for 2008 as detailed in table 3 above.

Kansas topped the 2004 list but dropped to 10 in 2008.[35] South Dakota has assumed the lofty spot as the nation's most economically free state—it was 15 in 2004—followed closely by Idaho, Colorado, and Utah, all of which ranked well in 2004.

South Dakota has no corporate income tax, no personal income tax, no personal property tax, no business inventory tax, and no inheritance tax. In 2007, the Small Business Survival Foundation ranked South Dakota as the best business climate for entrepreneurs.[36] In 2008, *Forbes* magazine ranked Sioux Falls as the best smaller metro area for business and careers.[37] Rapid City, South Dakota, was ranked 7. (See chapter 4 for a discussion of the link between state economic freedom and city economic performance.)

In contrast, Pennsylvania, California, New Jersey, Rhode Island, and New York bring up the rear. New York retains the dubious distinction as being the most economically oppressed state since 1999. Some states such as New York, Pennsylvania, and Utah have been remarkably stable since 1999—preserving their relative status quo for good or for bad. Other states have been on the move.

Turning first to the states that made the biggest improvements in relative economic freedom from 2004 to 2008, we found that South Dakota advanced 14 places, but even better were Minnesota, Illinois, and Wisconsin, which jumped 18, 19, and 20 places, respectively. There is an economic-freedom renaissance in the Upper Midwest and it is no accident that they are all neighbors—when one state reforms, it puts pressure on its neighbors to improve or be at a competitive disadvantage for attracting people and capital.

There is an economic-freedom renaissance in the Upper Midwest.

There is some evidence of a tiny "Schwarzenegger effect" in California. Since 2004—his first full year in office—the Golden State's relative economic freedom ranking has improved by two places from 49 to 47—nothing to crow about, however.

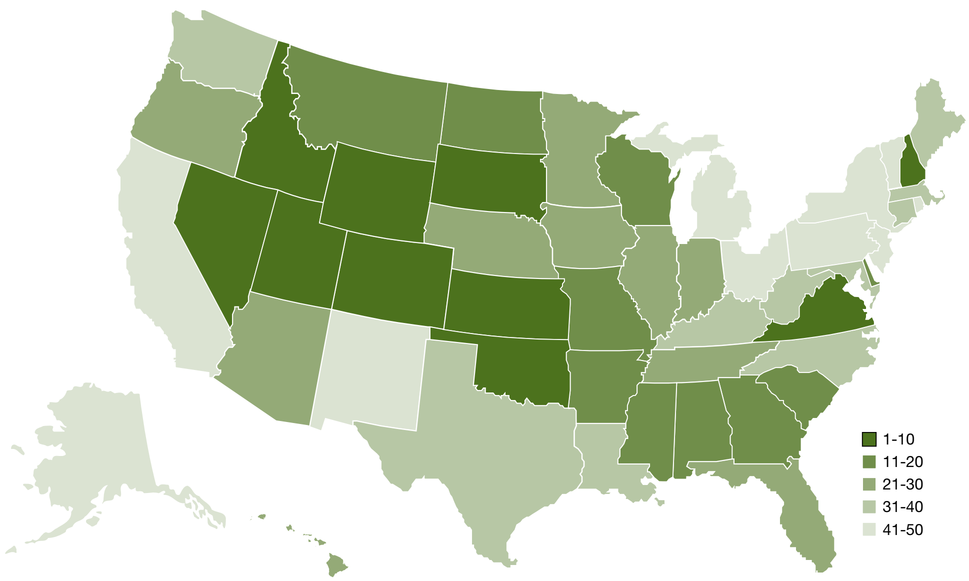
In contrast to the advancing states, Texas fell 14 spots; Alaska, Delaware, and North Carolina each dropped 12 spots; and Arizona fell 10. These states are headed in the wrong direction.

Figure 2 on page 37 plots economic freedom from coast to coast, and distinct patterns emerge. The Great Plains and Rocky Mountain states, colored in darkest green, have the most economic freedom. New Hampshire persists in defying the pattern in the Northeast. Maybe there is something to their motto "Live Free or Die." Virginia stands as a citadel of economic freedom in the South, which overall performs fairly well, but likely not as well as most people would expect.

Virginia stands as a citadel of economic freedom in the South.

The states with the least economic freedom, colored in lightest green, are clustered in the Northeast plus Alaska, California, and New Mexico. The Upper Midwest has improved significantly since 2004, the obvious exception being Michigan.

FIGURE 2. U.S. DISTRIBUTION OF ECONOMIC FREEDOM, 2008



POLICY CHANGES, 2004–2008

To discern changes in the rankings of individual indicators, we calculated the square of the difference between a state's previous ranking and its current ranking for each indicator, and summed over all 50 states. This sum is an approximate measure of overall variation in ranking pattern for an indicator. We then repeated this procedure for each quantitative indicator, and then compared the sums to find which indicators had the most variation in rankings across the states from 2004 to 2008.

In the fiscal sector, excise taxes on gas, state sales taxes, and individual income taxes had the most variation. Among indicators in the regulatory sector, school choice and weapons crime index had the most variation. The medical-liability-crisis indicator and most of the welfare indicators also had large variation from 2004 to 2008.

Below we give a flavor for some specific state policy changes in recent years that have improved or worsened a state's economic freedom rank.

- Higher tax rates and tax revenue reduce economic freedom by distorting relative prices and confiscating private resources for government use. New York increased an assortment of taxes since 2003 including personal income and unemployment. Also, the excise tax rate on gas increased much more in New York compared to the national average. Though it reduced its property-tax rate and capital-gains tax rate some, its overall performance in the fiscal sector remained quite low. New York stayed at the bottom of the barrel, ranking 48 in the fiscal sector and dead last overall.

High-income earners in New York faced the greatest increase in tax burden, up $2,300. Once again, New York remained at the bottom of the barrel.

- Twenty-five states increased tobacco excise taxes from 2004 to 2008. Iowa, Maine, Maryland, and Wisconsin increased their excise tax per pack of cigarettes by 100 percent since 2004. Wyoming, on the other hand, did not change any excise taxes and reduced indirect income taxes and corporate-tax rates; so, in the fiscal sector, Wyoming jumped from 35 to 5, and in the overall index it jumped from 9 in 2004 to 5 in 2008.

- Florida, New Jersey, and Ohio raised dramatically their motor fuel levies since 2004. In Florida, the levies increased by more than 100 percent; the excise tax for diesel also rose a substantial amount—Florida's ranking fell 38 spots. Surprisingly, the gas tax rate did not vary much in the above mentioned states.

- The tax burden on high-income people fell from an average across all 50 states of $14,453 per high-income family in 2004 to $13,854 in 2008. Connecticut had the greatest reduction in high-income tax burden, followed closely by New Jersey and Iowa. California, Colorado, and Oregon imposed higher tax burdens. High-income earners in New York faced the greatest increase in tax burden, up $2,300. Once again, New York remained at the bottom of the barrel.

- In the judicial sector, most states increased the number of active attorneys, which we coded as a reduction in economic freedom due to the greater threat of frivolous lawsuits and higher excessive tort costs. New York had the greatest increase of 7,491, followed closely by California with an increase of 6,562. In the judicial sector, New York ranked low at 43 and California was 38. On the other hand, North Dakota, where the number of attorneys increased by only 71, secured the top spot.

CHANGES IN ECONOMIC FREEDOM, 2004–2008

To understand better how the states performed in the different sectors in 2008 compared to 2004, we looked at the variation in sector-score rankings of states to see which states experienced the most changes in each sector over time:

- In the fiscal sector, the rankings of 24 states went up, and 22 states went down. The most remarkable changes were Washington up from 36 to 16, and Florida down from 20 to 44.
- In the regulatory sector, the rankings of 21 states went up, and 24 states went down. Illinois rises from 48 to 8, and South Carolina goes down from 5 to 33.
- In the judicial sector, the rankings of 23 states went up, and 24 states went down. Utah goes up from 48 to 6, and California goes down from 3 to 38.
- In the government-size sector, 26 states improved their rankings, and 23 states lowered their rankings. The most notable change is Montana ascending from 45 to 8, and Texas descending from 19 to 49.
- In the welfare-spending sector, 29 states went up, and 19 states went down. Compared to the other sectors, variations are less extreme. Louisiana is up from 45 to 22, and Oregon is down from 16 to 38.

Table 4 summarizes the changes in sector rankings over time.

TABLE 4. SECTOR-RANK CHANGES, 2004–2008

Sector	States Up	States Down	Salient Examples
Fiscal	24	22	Washington (36 to 16), Florida (20 to 44)
Regulatory	21	26	Illinois (48 to 8), South Carolina (5 to 33)
Judicial	23	24	Utah (48 to 6), California (3 to 38)
Government Size	26	23	Montana (45 to 8), Texas (19 to 49)
Welfare Spending	29	19	Louisiana (45 to 22), Oregon (16 to 38)

Finally, we compared the sector scores in table 2 vertically to discern regional patterns within sectors. Generally, as was also the case in 2004, the Northeast suffers the most infringement of economic freedom. This pattern is especially evident in the fiscal, regulatory, and welfare-spending sectors, the sectors that mattered most in our final index ranking. Table 5 shows sector rankings for six Northeastern states.

Generally, as was also the case in 2004, the Northeast suffers the most infringement of economic freedom.

TABLE 5. SECTOR RANKINGS OF NORTHEASTERN STATES, 2008

State	Fiscal	Regulatory	Welfare Spending
New York	48	35	50
Massachusetts	36	3	28
Rhode Island	27	46	48
Connecticut	45	29	35
New Jersey	50	44	30
Pennsylvania	42	19	37

Another notable state is California, which ranks 35 in the fiscal sector, 48 in the regulatory sector, and 46 in the welfare sector in 2008, continuing its low performance from 2004. These rankings put California at a distinct competitive disadvantage compared to its neighbors (see figure 2).

Though the Northeastern states still perform poorly in 2008, their relative rankings improved from 2004 in 10 of the 18 sector cells above. There is a faint glimmer of hope that these states are finally moving to unshackle their economies, albeit at a snail's pace.

That the nation's most densely populated states are also some of the least economically free is consistent with leading economic theories of the determinants of government intervention in markets.

IMPLICATIONS FOR THE FUTURE

The 2008 *Index* rankings will provide a good forecast of which states will prosper, and which will falter, in the year or two ahead. Our index is a good predictor, as the 2004 *Index* results confirmed.

In 2005, per-capita personal income grew 31 percent faster in the 15 most economically free states (as determined by the 2004 *Index*) than it did in the 15 states at the bottom of the list.[38] And employment growth was a staggering 216 percent higher in the most free states.

In 2005, the 15 states with the most economic freedom saw their general fund tax revenues *grow* at a rate more than 6 percent higher than the 15 least free states, despite their lower effective tax rate. Taxpayers paid 14 percent less in effective tax rates in 2005 in the most economically free states than did the taxpayers in the least free states. Effective tax rates are based on what people actually pay after deductions, exemptions, and credits.

Census data showed an astounding 245-percent difference in net state-to-state migration rates in 2005 between the freest states (net inflow) and least-free states (net outflow). "Live Free or Move" is fast becoming the national motto. The 2008 *Index* will be a good predictor of future state economic performance. Economic freedom, and its surrounding issues, will also impact future political developments.

In 2008, the uniquely wide-open race for president has sharply focused Americans' attention on economic issues from immigration to the mortgage crisis, from the price of oil to the outsourcing of jobs, from free-trade agreements to farm subsidies. The conclusion is inescapable—economic issues provoke our interest and divide Americans in important ways.

We believe the conclusions of this study can make an important contribution to the debate. As Americans ponder the source of their prosperity or their hard times, they would be well advised to look beyond their local jurisdictions. Is it like this everywhere? Why or why not? If residents of Ohio are upset that there have been significant job losses and economic hard times in their state, should they consider whether the boom in Nevada has any relation to it?

The implications, we believe, are apparent. Americans have exacted a kind of revenge on Brandeis's laboratories of democracy (see chapter 1). Instead of cheering the increasingly regulatory environment of some parts of the country, they have instead flocked to the less regulated and more economically free areas. At the most basic level, this means that we can confidently say that, on the whole, Americans prefer more economic freedom and are unwilling to fight city hall or their state legislature forever to get it. Instead, they are abandoning the states where economic policy hampers their freedom for states that more fully protect and advance it.

The more profound and potentially far-reaching implication of this observation is that this movement of people is beginning to shape not only local demographics, but also political realities. As states shift in their relative population, they also shift in their apportionment in Congress. States that in the past could command attention on the national political scene now find themselves with too few electoral votes to matter. As national economic policy is decided, the influence of the more regulated states will, as a function of migration, begin to decline.

As states shift in their relative population, they also shift in their apportionment in Congress.

The message to legislatures is clear: if you want to keep the best and the brightest, if you want to grow and develop and see your state's economy flourish, adopt policies that expand and protect your citizens' freedom and rid yourselves of regulations and roadblocks to prosperity.

These policies would: lower tax rates, or eliminate taxes altogether, on personal income, corporate income, estate, and capital gains; establish state-expenditure limits to rein in taxes and debt and the need for more government workers and bureaucratic agencies; drop occupational licensing, mandatory workers' compensation, and restrictions on parental choice of schools; restrict the transfer of private property to private developers through eminent domain; adopt a right-to-work law, and repeal prevailing-wage laws and minimum-wage requirements; adopt tort reforms that end lawsuit abuse; and stop welfare payments for people capable of working.

The message to citizens is equally clear: if you are dissatisfied with your economic opportunities, if you have grown tired of having your economic freedom curtailed at every turn, look around and consider moving. The enterprising states in this country have started a bidding war for your talents and they want to attract you by doing more to protect your freedom and bolster your prosperity.

Chapter 4. An Application of the U.S. Economic Freedom Index

HOW YOUR CITY CAN BENEFIT FROM GREATER ECONOMIC FREEDOM

BRENT M. EASTWOOD, PH.D.

Cities are engaged in a sharp-elbowed fight to attract businesses, capital, and people. Over the years, city and state officials have adopted a wide range of economic policies to compete: some tried and true, and some fads and untested or in need of critical re-examination.

Originally, my research as part of my Ph.D. dissertation set out to measure the effects of federal defense spending benefit growth on economic growth in U.S. cities.[39] But in the process, I discovered that my research also revealed a lot about the relevancy of new economic theories such as the "Creative Class" from Richard Florida[40] and "Social Capital" from Robert D. Putnam.[41] And, as reported below, it also showed the importance of the core underlying policy structure of states—their levels of "economic freedom."

My research used PRI's *U.S. Economic Freedom Index* to test the relationship between economic freedom and urban economic growth in U.S. cities from 2000 through 2004. I explained urban economic growth using the *Index* as the main explanatory variable.

I created two separate econometric models that used two different dependent variables for economic development: change in total personal income growth and change in total employment growth. The sample consisted of 272 cities in the 48 contiguous U.S. states taken from the Metropolitan Statistical Areas (MSAs) originally selected from Richard Florida.[42] The models controlled for several factors including population, region, economics, labor, politics, and geography.

MODEL 1: TOTAL PERSONAL INCOME GROWTH

Percent Change in Total Personal Income Growth = ß$_0$ + ß$_1$ **Economic Freedom**$_1$ + ß$_2$ Creative Class$_2$ + ß$_3$ Social Capital$_3$ + % ß$_4$ Defense Benefit Growth$_4$ + ß$_5$ Population$_5$ + ß$_6$ Regional Factors$_6$ + ß$_7$ Economic$_7$ + ß$_8$ Labor$_8$ + ß$_9$ Political$_9$ + ß$_{10}$ Location$_{10}$+ ß$_{11}$ Military$_{11}$ + £$_i$

MODEL 2: TOTAL EMPLOYMENT GROWTH

Percent Change in Total Employment Growth = ß$_0$ + ß$_1$ **Economic Freedom**$_1$ + ß$_2$ Creative Class$_2$ + ß$_3$ Social Capital$_3$ + % ß$_4$ Defense Benefit Growth$_4$ + ß$_5$ Population$_5$ + ß$_6$ Regional Factors$_6$ + ß$_7$ Economic$_7$ + ß$_8$ Labor$_8$ + ß$_9$ Political$_9$ + ß$_{10}$ Location$_{10}$+ ß$_{11}$ Military$_{11}$ + £$_i$

THE DEPENDENT VARIABLES

According to the U.S. Department of Commerce, Bureau of Economic Analysis, total personal income (TPI) is the income that is received by all persons from all sources. The TPI of an area is the income that is received by, or on behalf of, all the individuals who live in the area. The specific measurement for this variable is the percentage of TPI growth for each city from 2000 through 2004. TPI is the standard measure of income used by current regional development economists. Data were gathered from the Bureau of Economic Analysis.

According to the Bureau of Economic Analysis, total employment for states and local areas consists of "estimates of the number of jobs (full-time plus part-time) by place of work. Full-time and part-time jobs are counted as equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included."[43] The specific measurement for this variable is the percentage of total employment growth in each city from 2000 through 2004. Data were taken from the Bureau of Economic Analysis.

These dependent variables are standard measures of economic development and growth used by economists who study regional areas. Many social scientists, however, use the local unemployment rate or per-capita income to measure economic growth and prosperity. The downside of using the unemployment rate, according to some regional economists, is that it does not explain the growth of rapidly growing locations due to transitional and seasonal employment in those areas. Using the unemployment rate as a measure of economic growth gives some

These dependent variables are standard measures of economic development and growth used by economists who study regional areas.

regions a false appearance of prosperity. An area might have low and stable unemployment, but there might be few new jobs created and less economic opportunity in those communities; therefore, total employment growth is seen as a better measure of economic growth.

Per-capita income is seen as problematic by some regional economists because there is regional variation in the cost of living among different areas of the country. For example, southern states have lower per-capita income because these states have a lower cost of living. TPI is thus seen as a better measure of economic growth because it is a more equal measure from region to region.

THE MAIN EXPLANATORY VARIABLE: ECONOMIC FREEDOM

The *U.S. Economic Freedom Index* was developed by PRI, and defined economic freedom as "the right of individuals to pursue their interests through voluntary exchange of private property under a rule of law, and this freedom forms the foundation of all market economies."[44] Given this definition, the role of state governments becomes to provide a stable rule of law that enables economic freedom to flourish.

The index ranges from 0 to 50 with states having the lowest scores ranked as the "most economically free" while states with scores approaching 50 are ranked as the "least economically free."

A negative relationship was expected between the *U.S. Economic Freedom Index* scores and economic growth. As the economic freedom scores go up (less economically free), total personal income growth and total employment growth go down. It should be noted, however, that the PRI *Index* is a state-level index, not a county or city-level index, so it does not completely "drill down" to economic policymaking at the local level. Nevertheless, it is important and useful to understand the relationship, if any, between state economic freedom and urban economic growth. The results were revealing.

It is important and useful to understand the relationship, if any, between state economic freedom and urban economic growth.

THE RESULTS AND DISCUSSION

The adjusted R^2 for Model 1 was .60, meaning the independent variables collectively explained 60 percent of the variation in total personal income growth. The adjusted R^2 for Model 2 was .48 with the independent variables collectively explaining 48 percent of the variation in total employment growth. The economic freedom ranking from PRI had the predicted negative sign with a –.03 coefficient for both models. These coefficients were highly statistically significant at the .01 level. Holding all other independent variables constant, this means that a one-point decrease in a state's economic freedom *Index* score (in other words a better ranking or more economic freedom) increases total personal income growth by 3/100th of a percentage point.

Likewise, a one-point decrease in a state's economic freedom *Index* score (more economic freedom) increases total employment growth by 3/100th of a percentage point. Though the effects are small, keep in mind these are percentage changes to *total* income and *total* employment, so the absolute impact, compounded over time, can be very large.

The results demonstrate the important relationship between greater state economic freedom and stronger economic growth in U.S. cities. It is no accident that 13 of *Forbes*' top 20 best big and small cities for business in 2008 are located in states ranking in the top half of the 2008 *Index*. Mayors looking to jump-start their city's economy and attract jobs would be well served to pressure their state lawmakers to unshackle the state economy.

Mayors looking to jump-start their city's economy and attract jobs would be well served to pressure their state lawmakers to unshackle the state economy.

Appendix A. The Indicators and Data Sources

The indicators are listed by sector below. The sources are identified at the end of this appendix. The indicators marked with an asterisk (*) are not used in data set 4, which was the basis for the final index (see appendix B for more details on the data sets).

THE FISCAL SECTOR

1.	Top Capital Gains Tax Rate on Individuals 2006	1
2.	Sales, Gross Receipts, and Excise Taxes as a Percent of Personal Income 2006	1
3.	Does State Levy Estate, Inheritance, and/or Gift Taxes beyond the Federal Pick-up Tax? 2006	1
4.	Unemployment Tax (Minimum State Tax Rate Applied to State Wage Base as Share of State Average Annual Pay) 2006	1
5.	Health Care Cost Index 2004	1
6.	Electricity Utility Costs (Index of State's Average Revenue per Kilowatt-hour for Electricity Utilities) 2006	1
7.	Tax Freedom Day 2007: The Day When the Average Individual Stops Working to Pay Taxes	2
8.	State and Local Tax Revenue Per Capita 2005*	3
9.	Per-Capita State Tax Revenue 2005*	3
10.	State and Local Taxes as a Percent of Personal Income 2005	3
11.	Individual Income Tax Per Capita 2005*	6
12.	Per-Capita State and Local Government Property Tax Revenue 2005*	7
13.	Average State Tax ($) per Acre of Agricultural Real Estate 2006	9
14.	Property Taxes Per Capita 2006*	6
15.	Property Taxes as a Percentage of Personal Income 2006	6
16.	Tax Burden ($) on High Income Family 2006	6
17.	Highest Personal Income Tax Rate (%) 2006*	6
18.	Lowest Individual Income Tax Rate (%) 2007	4
19.	Highest Individual Income Tax Rate (%) 2007	4
20.	Lowest Corporate Income Tax Rate (%) 2007	4
21.	Highest Corporate Income Tax Rate (%) 2007	4
22.	Per-Capita State and Local Government Sales Tax Revenue 2005*	7
23.	Per-Capita State Government General Sales and Gross Receipts Tax Revenue 2006*	8
24.	Per-Capita State Government Insurance Premium Tax Revenue 2006*	8
25.	State General Sales and Gross Receipts Tax Rate (%) as of 01/2002	10 (2002, vol. 34, 287)
26.	Per-Capita State Government Public Utilities Sales Tax Revenue 2006	8
27.	Per-Capita State Government Motor Fuels Sales Tax Revenue 2006*	8
28.	State Excise Gas Tax Rate (cents per gallon) as of 01/2008	10
29.	State Excise Diesel Tax Rate (cents per gallon) as of 01/2008	10
30.	Per-Capita State Government Tobacco Products Tax Revenue 2006*	8
31.	State Excise Tax per Pack of Cigarettes (cents) 2006	3

32.	State Distilled Spirits Excise Tax Rate (dollars per gallon) as of 01/2003	10 (2003, vol. 35, 348)
33.	Per-Capita State Government Alcoholic Beverage Sales Tax Revenue 2006*	8
34.	Per-Capita State Government Motor Vehicle and Operators License Tax Revenue 2006	8
35.	Per-Capita State Government Total License Taxes 2006	8
36.	Per-Capita State Government Corporation License Tax Revenue 2006	8
37.	Per-Capita State Government Hunting and Fishing License Tax Revenue 2006	8
38.	Per-Capita State Government Corporation Net Income Tax Revenue 2006*	8
39.	Per-Capita State Government Occupancy and Business Tax Revenue 2006	8
40.	Per-Capita State Government Death and Gift Tax Revenue 2006	8
41.	Per-Capita State Government Severance Tax Revenue 2006	8
42.	Local Expenditures as Percent of Total State and Local Expenditures 2005	7
43.	Local Revenue as Percent of State and Local Revenue 2005*	7
44.	Difference between Per-Capita State and Local Revenue and State and Local Expenditure 2005	7
45.	Per-Capita State and Local Government Debt Outstanding 2005	7
46.	Standard & Poor's State Bond Ratings 2005	11
47.	Does State Have Tax Exemptions for Fertilizer, Seed, and Feed?	5
48.	Does State Have Tax Exemptions for Insecticides and Pesticides?	5
49.	Does State Have Tax Exemptions for Grocery Food?	5
50.	Does State Have Tax Exemptions for Meals?	5
51.	Does State Have Tax Exemptions for Custom Software?	5

THE REGULATORY SECTOR

52.	Licensing Requirements for the Following Non-Health Professions: 2000	10 (2001, vol. 33, 378)
A.	CPA	
B.	Architect	
C.	Auctioneer	
D.	Barber	
E.	Cosmetologist	
F.	Embalmer	
G.	Prof Engineer	
H.	Funeral Director	
I.	Insurance Agent	
J.	Insurance Broker	
K.	Landscape Architect	
L.	Polygraph Examiner	
M.	Real Estate Agent	
N.	Real Estate Broker	
O.	Surveyor	
53.	Licensing Requirements for the Following Health Professions: 2000	10 (2001, vol. 33, 379)
A.	Acupuncturist	
B.	Chiropractor	
C.	Prof Counselor	
D.	Alcoholism Counselor	
E.	Drug Counselor	
F.	Pastoral Counselor	
G.	Substance Abuse Counselor	

H. Dentist
I. Dental Assistant
J. Dental Hygienist
K. Denturist
L. Dietician
M. Emergency Medical Technician
N. Hearing Aid Dealer and Fitter
O. Homeopath
P. Massage Therapist
Q. Licensed Practical Nurse
R. Nurse Midwife
S. Nurse Practitioner
T. Registered Nurse
U. Nursing Home Admin
V. Occupational Therapist
W. Occupational Therapy Assistant
X. Optician
Y. Optometrist
Z. Osteopath
AA. Pharmacist
BB. Physical Therapist
CC. Physical Therapist Assistant
DD. Physician
EE. Physician Assistant
FF. Podiatrist
GG. Psychologist
HH. Radiological Technologist
II. Radiation Therapist
JJ. Respiratory Therapist
KK. Sanitarian
LL. Social Worker
MM. Speech Pathologist
NN. Marriage and Family Therapist
OO. Veterinarian
PP. Veterinary Tech
54. Continuing Education Requirements for Selected Professions: 1999 10 (2001, vol. 33, 385)
A. Architect
B. CPA
C. Dentist
D. Prof Engineer
E. Lawyer
F. Nurse
G. Nursing Home Admin
H. Optometry
I. Pharmacy
J. Physical Therapist
K. Physician
L. Psychology
M. Real Estate
N. Social Work

99.	Does State have Primary Enforcement for Seat Belt Use Laws?	20
100.	Minimum License Age—Learners	21
101.	Minimum License Age—Full	21
102.	FTE Employees of Insurance Regulation Organization 2006	22
103.	State Legislation about Environmental Health	23
A.	Indoor Air Quality	
B.	Pesticides	
C.	Mercury	
D.	Lead	
E.	Children's Environmental Health	
F.	Asbestos	
G.	Toxics	
H.	Tracking and Surveillance	
104.	Percent of Students in Private Schools (K–12th Grade), 2006	6

THE JUDICIAL SECTOR

105.	Number of Resident Active Attorneys 2006	24
106.	Attorney General Salary 2006*	10 (2008, vol. 40)
107.	Compensation of Judges—General Trial Courts 2006	10 (2008, vol. 40)
108.	Compensation of Judges—Courts of Last Resort 2006	10 (2008, vol. 40)
109.	Terms of Judges—General Trial Courts 2001	10 (2008, vol. 40)
110.	Term of Judges—State Courts of Last Resort 2001	10 (2008, vol. 40)
111.	Selection of Judges (Appointed or Elected)—Supreme Courts 2002	10 (2008, vol. 40)
112.	Selection of Judges (Appointed or Elected)—Lowest Level Courts 2002*	10 (2003, vol. 40)
113.	Does State Have Illinois Brick Repealer Statutes?	26
114.	Is There Some Reform of Punitive Damage Awards as of 2007?	27
115.	Is There Some Joint and Several Liability Reform as of 2007?	27
116.	Is There Some Reform of Pre-Judgment Interest as of 2007?	27
117.	Is There Some Reform of Collateral Source Rule as of 2007?	27
118.	Is There Some Reform of Non-Economic Damage Awards as of 2007	27
119.	Is There Some Product Liability Reform as of 2007?	27
120.	Is There Some Class Action Reform as of 2008?	27
121.	Is There Some Reform of Attorney Retention Sunshine as of 2008?	27
122.	Is There Some Appeal Bond Reform as of 2008?	27
123.	Is There Some Jury Service Reform as of 2008?	27
124.	Is State in Medical Liability Crisis as of 2008?	28
125.	Mandatory Minimum Levels of Professional Liability Insurance	28
126.	Laws about Caps on Damages	28

THE GOVERNMENT-SIZE SECTOR

127.	State and Local Total Expenditures as a Percent of GSP 2004	11
128.	State and Local Total Revenue as a Percent of GSP 2004	11
129.	Rate of State and Local Government FTE Employees as of 03/2001 (per 10,000)	10 (2003, vol. 35, 460)
130.	Rate of FTE Local Government Employees as Percent of Rate of FTE State and Local Government Employees 2006	6
131.	Legislators per Million People 2006*	6
132.	Total Number of Government Units 2002	32
133.	Ratio of Local to State Total Education Employees 2006*	6

THE WELFARE-SPENDING SECTOR

134.	Per-Capita State and Local Welfare Spending 2006*	6
135.	Percent of Population Receiving Food Stamps 2006	6
136.	TANF Recipients as Percent of Population 2006	6
137.	Percent of Population Receiving Public Aid 2006	29
138.	Medicare Benefit Payments per Enrollee 2006	30
139.	Per-Capita Medicaid Spending 2006	6
140.	Average Monthly Food Stamp Benefit per Recipient 2007	31
141.	Monthly TANF Benefit for Family of Three as of June 2001	10 (2002, vol. 34, 451)
142.	Average Monthly Benefit per Participant for Women, Infants, and Children (WIC) Special Nutrition Program 2007	31
143.	Commodity Costs of National School Lunch Program per Participant 2006	31

THE DATA SOURCES

1. Keating, J. (2006), *Small Business Survival Index 2006: Ranking the Policy Environment for Entrepreneurship Across the Nation* (Washington, D.C.: Small Business Survival Committee)
2. Tax Foundation, http://www.taxfoundation.org/research/show/22328.html
3. Federation of Tax Administrators, http://www.taxadmin.org
4. Tax Policy Center, http://www.taxpolicycenter.org
5. *2008 State Tax Handbook* (Chicago: CCH Incorporated)
6. *CQ's State Fact Finder 2006* (Washington, D.C.: Congressional Quarterly Incorporated)
7. *State and Local Government Finances by Level of Government and by State: 2004–2005*, U.S. Census Bureau/ Government/Finance, http://www.census.gov/govs/estimate/
8. *State Government Tax Collections: 2002,* U.S. Census Bureau/ Government/ Tax Collections, http://www.census.gov/govs/statetax/
9. *Agricultural Resources and Environmental Indicators 2006*, Economic Research Service, U.S. Department of Agriculture, http://www.ers.usda.gov/publications/arei/
10. *The Book of the States* (Lexington, KY: Council of State Governments)
11. *The Statistical Abstract of the United States* (2002), http://www.census.gov/
12. Center for Education Reform, http://www.edreform.com/Ed
13. State Workers' Compensation Laws, Employment Standards Administration, U.S. Department of Labor, http://www.dol.gov/esa/regs/statutes/owcp/stwclaw/stwclaw.htm
14. United States Department of Labor, http://www.dol.gov/esa/programs/whd/state/righttowork.htm, http://www.dol.gov/esa/minwage/america.htm, and http://www.dol.gov/esa/programs/whd/state/dollar.htm
15. Teke, Best, Mintrom (1995), *Deregulating Freight Transportation* (Washington, D.C.: American Enterprise Institute)
16. Oregon Workers' Compensation Division, Oregon Department of Consumer and Business Services, http://egov.oregon.gov/DCBS/docs/2007_rates/multistate_chart.pdf
17. Wallman, S. M. H. (1991), "The Proper Interpretation of Corporate Constituency Statutes and Formulation of Director Duties," *Stetson Law Review* 21: 1, pp. 163–196
18. Defenders of Property Rights, http:// www. defendersproprights.org
19. Henderson, H. (2000), *Gun Control* (Facts On File, Inc.)
20. *The Fact Book 2006*, Insurance Information Institute, New York
21. *The Online Study Guide for Student Drivers*, http://golocalnet.net
22. *Insurance Department Resources Report 2001*, National Association of Insurance Commissioners, https://external-apps.naic.org/insPubs/orderDetail.jsp
23. The Environmental Health Legislation Database, National Conference of State Legislators/ Policy Issues/Environmental Protection, http://www.ncsl.org/programs/ESNR/ehdatabases.htm

24. Market Research Department, American Bar Association,
http://www.abanet.org/marketresearch/re source.html
25. *Injuries in Auto Accidents: An Analysis of Auto Insurance Claims*, June 1999,
Online Library, American Institute for CPCU and Insurance Institute of America,
https://www.aicpcu.org/www/pdb_pkg.login
26. *Bunker's Glass Co. v. Pilkington PLC*, Arizona Supreme Court No. CV-02-0140-PR, Arizona Supreme Court No. CV-02-0175-PR, http://web.lexisnexis.com/universe/document?_m=accddfdd8dc413c3dc31e75e6cc150dc&_docnum=1&wchp=dGLbVlb- zSkVb&_md5=2a1c12c75fec23a00a07dc4ba5765601
27. *Tort Reform Record: June 2007*, American Tort Reform Association, http://www.atra.org
28. State Advocacy Resource Center, American Medical Association, http://www.amaassn.org/ama/pub/category/7470.html
29. O'Leary Morgan, K., Morgan S., Uhlig M.A., eds. (2002), *State Rankings 2002* (Lawrence, KS: Morgan Quinto Press)
30. Centers for Medicare and Medicaid Services, http://cms.hhs.gov/statistics/enrollment/st01all.asp http://www.cms.hhs.gov/statistics/feeforservice/BenefitPayments01.pdf
31. Food, Nutrition, and Consumer Services, U.S. Department of Agriculture,
http://www.fns.usda.gov/pd/18fsavgben.htm
http://www.fns.usda.gov/pd/25wifyavgfd$.htm
http://www.fns.usda.gov/pd/01slfypart.htm
http://www.fns.usda.gov/pd/07slcomm$.htm
32. *Government Organization—2002 Census of Governments,* U.S. Census Bureau,
http://www.census.gov/prod/2003pubs/gc021x1.pdf
Migration Data: http://www.census.gov/prod/2006pubs/p25-1135.pdf

Appendix B. The Data Sets

Appendix B describes the data sets and methods used to parse and reduce redundancy. The parsing techniques start with data set 1, and then follow with four others labeled 2 through 5 below.

DATA SET 1 ("THE FULL HOUSE")

Contains all 143 economic freedom indicators. Occupational licensing, education-requirement indicators for each profession, and state legislation about environmental health are treated as separate indicators rather than compiled into three indicators. This gives a total of 219 indicators.

DATA SET 2

Contains 127 economic freedom indicators. Selected indicators from data set 1 were eliminated because of redundancy. Also, occupational licensing and education-requirement indicators for each profession are averaged into three indicators instead of considered separately.
The indicators not included are: 1–6, 8, 14, 17, 22, 89–97, 133, 135, and 136.
The occupational licensing and education indicators (52a–o, 53a–pp, and 54a–o) are averaged into 52avg, 53avg, and 54avg. In addition to pairing down the number of indicators, the indicators are sorted into five sectors: fiscal, regulatory, judicial, government size, and welfare spending. The fiscal sector contains 41 indicators: 7, 9–13, 15, 16, 18–21, and 23–51. The regulatory sector contains 50 indicators: 52avg, 53avg, 54avg, 55–88, and 98–104. The judicial sector contains 22 indicators: 105–126. The government-size sector contains six indicators: 127–132. The welfare spending sector contains eight indicators: 134 and 137–143.

DATA SET 3

Data set 3 is divided into the same sectors as data set 2. There are fewer indicators used, however, in data set 3 (47 indicators). Some of the indicators are averages of groups of indicators that are closely related.
The new indicators for the fiscal sector are created as follows: Indinc is an indicator that deals with personal income taxes. It is the average of indicators 11, 18, and 19. Saltax is an indicator of sales taxes. It is the average of indicators 22 and 25. Exctax is an indicator of excise taxes. It is the average of indicators 28–33. Lictax deals with license taxes. It is the average of indicators 34–37, and 39. Corp is concerned with corporate taxes. It is the average of indicators 20, 21, and 38. Debt captures state debt. It is the average of indicators 44 and 45. TaxeAvg is about tax exemptions. It is the average of indicators 47–51. Along with these new indicators, indicators 7, 9, 12, 16, 40, and 41 form the fiscal sector. So the fiscal sector has a total of 13 indicators, but it actually uses 32 indicators.

The new indicators for the regulatory sector are created as follows:
Purlaw is an indicator that captures purchasing regulations for state and local government agencies. It is an average of indicators 56–68. Lableg is an indicator of labor legislation. It is constructed by averaging indicators 78–84 to get the variable wcleg. Then the average of indicators 69, 70, 71, 77, and wcleg is taken to get lableg. Schleg is an indicator of public-school regulation. It is constructed by averaging indicators 72–74 and 104. SBreg is concerned with state seat belt laws. It is an average of indicators 98 and 99. MAreg deals with state provisions about the minimum age for driver's licenses. It is the average of indicators 100 and 101. EnviLeg is the average of indicators about state legislation on environmental health, i.e., indicators from 103a to 103h. Along with the new indicators, the old indicators 52avg, 53avg, 54avg, 55, 85–88, and 102 are used in the regulatory sector. So the regulatory sector is constructed with 15 indicators, but actually uses 42 indicators.
The judicial sector uses five new indicators: AvgJS captures judges' compensation. It is the average of indicators 107 and 108. AvgJT is the average of indicators about judges' terms, i.e., indicators 109 and 110. AvgJSE deals with judges' selection method. It is the average of indicators 111 and 112. Tort captures efforts to reform the tort law in the states. It is the average of indicators 114–123. MLRAvg copes with medical-liability reform indicators. It is the average of indicators 124–126. These five new indicators and indicators 105, 106, and 113 are averaged to construct the score for the judicial sector. So the judicial sector is constructed with eight indicators, but actually uses 22. Two new indicators are formed for the government-size sector: Govrep captures the amount of representation citizens in each state have in their state government. It is the average of indicators 131 and 132. Govemp captures the size of the government workforce. It is the average of indicators 129 and 130. The score for the government-size sector is determined by averaging govrep, govemp, and indicator 127. Five indicators are used in all to produce three final indicators. No new indicators were constructed for the welfare-spending sector. It is constructed the same as in data set 2, by averaging indicators 134 and 137–143, yielding eight indicators.

DATA SET 4

Data set 4 is much the same as data set 2 with one important difference. Where there were suitable alternative indicators, indicators of the magnitude of tax and general revenues were replaced. This was a response to the assertion made throughout the literature that tax rates and government expenditures are better measurements of the loss of economic freedom than are revenues. Using data set 1 as a reference, the indicators not included are as follows: 8, 9, 11, 12, 14, 17, 22–24, 27, 30, 33, 38, 43, 89–97, 131, 133, and 134.
The fiscal sector was constructed with 35 indicators: 1–7, 10, 13, 15, 16, 18–21, 25, 26, 28, 29, 31, 32, 34–37, 39–42, 44–46, 51, and two new indicators about tax exemptions: AgriAvg (average of indicators 47 and 48, dealing with tax exemptions for agricultural products) and FoodAvg (average of 49 and 50, dealing with tax exemptions for food).
The regulatory sector is the same as in data set 2, with 50 indicators.
The judicial sector uses three new indicators. They are AvgJS (average of indicators 106 and 108), AvgJT (average of 109 and 110), and AvgJSE (average of 111 and 112). Besides these three new indicators, the old indicators 105, 106, 113–126 are included, so there are 19 indicators in judicial sector.
The government-size sector uses the same six indicators as in data set 2.
The welfare-spending sector uses the same eight indicators as in data set 2.

DATA SET 5

Data set 5 is much the same as data set 3, with the same types of modifications found in data set 4.

The new indicators are all the same as in data set 3 except for the following: Indtax is the average of indicators 18 and 19. Saletax replaces indicator 22 with indicator 2. Utiltax, which captures utility taxes, is the average of indicators 6 and 26. Exctax is the average of indicators 28, 29, 31, and 32. Corp is the average of indicators 20 and 21. Dgtax, which captures death and gift taxes, is the average of indicators 3 and 40. All of the new indicators are combined with indicators 1, 4, 5, 7, 10, 13, 15, 16, 41, and 45 to calculate the fiscal-sector score. All the other sectors, and new indicators within the sectors, are the same as in data set 3.

Appendix C. Responses to Critics and Criticism

LAWRENCE J. MCQUILLAN, PH.D.

The following statements and replies are in response to criticism of the 2004 *U.S. Economic Freedom Index*. Though all criticism is valuable, if for no other reason than to discover how passages can be re-worded differently to prevent future misunderstandings, I singled out the statements below for comment because these are substantive in nature and generally misrepresent or misunderstand the methodology of our study. The source of each statement, paraphrased from the original publication, is given in the notes.

The *U.S. Economic Freedom Index* measures and ranks which states are the best places, and the worst places, to conduct business in America.[45]

False. Businesses locate based on many factors including land and housing costs, transportation and school systems, labor and energy costs, weather, proximity to distribution networks, and government rules and regs, what we call "economic freedom." We measured only economic freedom, not the "business climate" generally, which is beyond the scope of our study. This explains why our results diverge from other indexes that measure concepts such as business climate or competitiveness. Apples must be compared to apples.

The weight that a business (or an individual) places on any given factor can vary tremendously. Economic freedom might be important and determinant for one business, but not for another. Thanks to the *U.S. Economic Freedom Index,* however, researchers now have a yardstick by which to measure economic freedom across states and assess its impact on business and personal decisions.

It is inappropriate to select an index based on its ability to explain human migration between states because economic freedom is far down the list of what drives decisions about location, whether for businesses or individuals.[46]

False. While we certainly agree that it is down the list, this is not the same as saying economic freedom is not on the list or doesn't matter. Our statistical analysis shows that, at the margin, people are moving from less-free states to freer states, everything else considered. The interesting analysis of cattle behavior is at the hedgerow, not in the middle of the field.

Further research will develop a clearer picture of which people are first to discard the yoke of economic oppression and flee to freer locales. Today's government officials trade on people not moving in response to differences in economic freedom or being slow to react—and there might be good reasons why many people don't move—appropriating people's psychic and financial "rents" in the process. But our analysis reveals that many people decide the price extracted is too high and flee to greener pastures, taking their human and financial capital with them and blazing new trails for others to follow.

The selection of the variables was based, not on their relationship with economic freedom, but on their statistical relation to migration.[47]

False and an incomplete description. Our method began with the classical approach of using our judgment and the scholarly literature to compile a list of relevant indicators. This is how most indexes are compiled and the process stops here. Most index researchers assume they immediately have the correct index. We believe that there is no absolutely correct index, so we introduced the next step to create a more objective, precise, and market-driven final index.

Next the indicators of economic freedom were converted into a number of indexes using various statistical techniques. We then compared each index to the others in terms of its ability to explain net population migration rates across states, *holding other factors constant*. We posit that migration is the purest individual expression of responses to differences in economic freedom, other things equal.

The best index is then used to rank the U.S. states in terms of economic freedom. The final indicators that were included in the best index were those that best tracked ordinary people's migration across states based on differences in economic freedom. This last point is critical. Our index offers the clear advantage that it is evaluated in the marketplace by the actual decisions people make about where to live. We adopt a migration metric for economic freedom. If people are moving from one state to another, other things equal, we assert and believe that this is a market-based response to differences in economic freedom.

(It has been argued that our methodology led to the exclusion of the state capital-gains tax rate. This tax rate was included in the initial pool of indicators, but was not included as a separate indicator in the final 2004 index because the Tax Freedom Day indicator, which includes capital-gains tax revenue, did a better job of tracking our metric for economic freedom.)

Some of the variables lack clear relevance to economic freedom, some are duplicative, and others suffer from a range of problems.[48]

There is scholarly literature, much of it in the public-choice school of economic thought, to support the inclusion of indicators such as the attorney-general's salary; the number of legislators per million people; and the number of government units. Readers are encouraged to study this literature. Keep in mind that some indicators are second-best proxies for hard-to-measure or impossible-to-measure underlying factors.

A closer examination reveals that all of the indicators that were alleged to be duplicative (multiple indicators in the areas of tobacco taxes, purchasing preferences for recycled products, alcohol taxes, and workers' compensation) in fact each track something unique and different. It is false to say these indicators are duplicative. Also, as discussed in the report, we performed redundancy parsing.

Finally, it was alleged that the indicator on per-capita tobacco revenues will penalize states with a high percentage of residents who choose to smoke; and an indicator on percentage of land owned by the federal government penalizes states with large military bases. Our response is: "so what?" We are concerned with measuring economic freedom (lost private resources due to tobacco taxes; lost private land), not the causes of lost economic freedom. Our sole objective is to measure economic freedom, not to measure the factors that drive changes in economic freedom or account for it. These indicators, therefore, are appropriate to include as measures of economic freedom.

The variables are weighted by principal components' analysis.[49]

False. This statement reflects a lack of understanding of our methodology. The sector scores were weighted by principal components' analysis, not the individual indicators themselves.

Weighting the variables by principal components' analysis increases the weight of individual variables based not on their relationship to economic freedom but rather on differences in variation.[50]

False. Again, this statement reflects a true lack of understanding of our methodology. The sector scores were weighted, not the individual indicators themselves.

As stated in the study: "Principal components' analysis extracted from our data the true sources of variation [among the states] by more heavily weighting those sectors that varied most, that is, those sectors where the states differed most. The analysis gave greater weight to sectors that had more useful information relative to sectors with less useful information. By giving greater weight to sectors with more variability, finer distinctions were clearly drawn since states differ most in those sectors."

The underlying indicators were chosen based on their relationship to economic freedom, as discussed above.

The correlation is low between the state rankings in the *U.S. Economic Freedom Index* and the state rankings in *Economic Freedom of North America* because the *U.S. Economic Freedom Index* does not actually measure economic freedom.[51]

False. The correlation is low because the *U.S. Economic Freedom Index* is a comprehensive and accurate measure of economic freedom while the other index is not.

The tax indicators are a mixture of rates and revenues. Since revenues are equal to the rates times the bases, a high amount of revenue per capita can reflect high rates (in which case it is double counting with the rate measure) or strong tax bases.[52]

By including rates and revenues, the average ranking of the two indicators provides a fuller picture as to whether it is the rates or the tax bases that are driving the revenue per-capita amounts. It is precisely because they are entangled that it is important to include both because it provides a clearer picture.

The index authors applaud right-to-work laws, which in fact prevent unions from making dues payments or check-offs the subject of collective bargaining. It seems that some rights to freely negotiate contracts are to be protected, others to be outlawed.[53]

Unionization in the United States exists in its present form only because of federal and state laws that allow unions to intimidate, obstruct, and sue employers and replacement workers. American unions do not exist because of freely negotiated contracts.

Additionally, unions' ability to force employers to include clauses in their union contracts that require all employees to either join the union or pay union dues as a condition of employment violates principles of economic freedom. Furthermore, forced union dues are often used to support political causes—causes that many union members oppose. From the perspective of employees, collective bargaining clearly violates their freedom to contract.

Workers should be free both to join unions and to refrain from joining unions. Unions do not respect the rights of minority employees who do not want to join, support, or be represented by unions since they do not allow them to opt out. There is no respect of freedom of contract between union bosses and the employees they allege to represent. Right-to-work laws increase economic freedom for employers and employees by reestablishing arms-length contracting in the workplace.

The index ranks states as "freer" if they require mandatory minimum liability insurance for physicians and have caps on damage awards, despite the fact that these are regulations that interfere with free markets.[54]

False. These statutes pertain to civil tort law, which comes into play precisely when there is no contractual relationship between the parties. These statutes define the "rule of law" that operates when someone is injured or damaged. Fundamentally, tort law is "extra-market" meaning it is outside the market realm and acts as an impartial referee to resolve disputes arising from market interaction. When tort law is efficient, it ensures full compensation to truly injured people thereby encouraging exchange and greater economic activity. These two tort reforms are best thought of as part of the rule of law that ideally allows economic freedom to flourish. These laws are the restraints and restrictions we place on our own freedoms ultimately to achieve a safer and more prosperous civil society.

States with higher salaries for judges are ranked better because, the index authors contend, higher salaries attract more experienced, higher quality judges. This logic is not extended to other public employees.[55]

Our preoccupation with judges reflects the prominence and the importance of the rule of law in our definition of economic freedom.

From the perspective of the hard-pressed beneficiaries and other supporters of welfare transfer programs, freedom from contributing to Medicare, Medicaid, and food stamps might not be well-received.[56]

This is irrelevant since we are not judging the wisdom, merit, or purpose of the welfare transfer programs or whether the programs are liked or disliked and by whom. We are only evaluating whether each program increases or decreases economic freedom, as defined, and by how much.

To select the best index of the 48 different indexes in 2004, the authors conducted a simple one-variable regression model that fails to control for other factors influencing migration. The index authors experimented with 48 different indexes and then picked the one that did the best job of producing the answer it was looking for.[57]

False and a misrepresentation of our methodology. We selected the best index based on a comparison of indexes in explaining net population migration rates for the 50 U.S. states in a *multivariate* regression model that controlled for the influences of other major factors known to drive migration rates. As we stated in 2004 in terms that could not be clearer: "Of course, people migrate for reasons other than economic freedom, for example, to be near friends, to get a better income, or for the weather. In our statistical analysis, we control for the influence on migration of these other factors." We used an objective method based on econometric principles to select the best index that conformed to our market-based migration metric for economic freedom.

Notes

[1] The most comprehensive sources for information on how American life has improved are the exhaustive statistical sources available from the U.S. Census Bureau and from other compilers of these data. The most recent Census data are conveniently available online (http://www.census.gov/compendia/statab/). Two recent publications provide a rich historical context for the changes in these measures of economic performance: Susan B. Carter et al., eds., *Historical Statistics of the United States: Millennial Edition*, 5 vols. (New York: Cambridge University Press, 2006); Ben J. Wattenberg, *The Statistical History of the United States: From Colonial Times to the Present* (New York: Basic Books, 1976). Also useful are: Stanley Lebergott, *Pursuing Happiness: American Consumers in the Twentieth Century* (Princeton: Princeton University Press, 1993); Michael W. Cox and Richard Alm, *Myths of Rich and Poor: Why We're Better Off Than We Think* (New York: Basic Books, 1999); Robert William Fogel, *The Escape From Hunger and Premature Death, 1700-2100: Europe, America, and The Third World* (New York: Cambridge University Press, 2004).

[2] A brief sample of the best of the many studies in this area would include: Nathan Rosenberg and L.E. Birdzell, *How The West Grew Rich: The Economic Transformation of the Industrial World* (New York: Basic Books, 1986); David S. Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor* (New York: W. W. Norton, 1998); Daniel Yergin and Joseph Stanislaw, *The Commanding Heights: The Battle for the World Economy,* Revised and Updated Edition (New York: Simon and Schuster, 2002); Hernando De Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books, 2000).

[3] *New State Ice Co.* v. *Liebmann*, 285 U.S. 262 (1932) [Brandeis dissenting.] In this case, Brandeis voted to uphold an Oklahoma law that declared the manufacture, sale, and distribution of ice to be a public business, thereby requiring a licensing regime. The legislature, in a classic case of rent-seeking, gave the licensing board the discretion to withhold licenses if existing licensees "are sufficient to meet the public needs." The result was a monopoly capture by the existing ice companies when they gained the political power sufficient to block new competitors. Justice Sutherland and the Court struck down the Oklahoma law on the moribund judicial distinction between public and private businesses, which the Court obliterated two years later in *Nebbia* v. *New York* 291 U.S. 502 (1934).

[4] Charles Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64:5 (October 1956): 416–424.

[5] The "amagi" cuneiform used by Liberty Fund, Inc., for its logo, for example, represents the earliest-known form of the word (http://www.libertyfund.org/aboutlogo.htm).

[6] John D. Byars, Robert E. McCormick, and T. Bruce Yandle, *Economic Freedom in America's 50 States* (Arlington, Va.: State Policy Network, 1999).

[7] Ying Huang, Robert E. McCormick, and Lawrence J. McQuillan, *U.S. Economic Freedom Index: 2004 Report* (San Francisco: Pacific Research Institute, 2004).

[8] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), I.2.1. The quotation here is from the online Liberty Fund edition, http://www.econlib.org/LIBRARY/Smith/smWN.html.

[9] Ibid., IV.9.51.

[10] Jean-Baptiste Say, *Treatise on Political Economy* (1803), I. XVIII.11. The quotation here is from the translation available on the Liberty Fund website, http://www.econlib.org/LIBRARY/Say/sayTtoc.html.

[11] Thomas Jefferson, Letter to John Adams, July 1785, in John P. Foley, ed., *The Jefferson Cyclopedia* (New York: Funk & Wagnalls Co., 1900), 361.

[12] Arthur Lee, *An Appeal to the Justice and Interest of the People of Great Britain, in the Present Dispute with America*, quoted in James W. Ely, *The Guardian of Every Other Right: A Constitutional History of Property Rights*, Third Edition (New York: Oxford University Press, 2008), 26.

[13] In addition to Ely's *Guardian*, other useful sources on the Founders' ideas about the connection between economic freedom and liberty include: Bernard Siegan, *Economic Liberties and the Constitution* (Chicago: University of Chicago Press, 1980); Ellen Frankel Paul and Howard Dickman, eds., *Liberty, Property, and the Foundations of the American Constitution* (Albany, NY: State University of New York Press, 1989); Edmund S. Morgan, *The Challenge of the American Revolution* (New York: W. W. Norton, 1972).

[14] James Madison, "Property," in Robert A. Rutland and Thomas A. Mason, eds., *The Papers of James Madison*, vol. 14 (Charlottesville, Va.: University Press of Virginia, 1983), 266–268. This is also available online: http://press-pubs.uchicago.edu/founders/documents/v1ch16s23.html

[15] F. A. Hayek, *The Road to Serfdom*, 50th Anniversary Edition (Chicago: University of Chicago Press, 1994), 101.

[16] Ludwig von Mises, *Human Action: A Treatise on Economics*, 4th Revised Edition (San Francisco: Fox & Wilkes, 1996), 285.

[17] Milton Friedman, *Capitalism and Freedom*, 40th Anniversary Edition (Chicago: University of Chicago Press, 2002), 8.

[18] Ayn Rand, *For the New Intellectual* (New York: Signet, 1961), 25.

[19] Ayn Rand, "Conservatism: An Obituary," in *Capitalism: The Unknown Ideal* (New York: Signet, 1967), 192.

[20] Ayn Rand, "Requiem for Man," in *Capitalism: The Unknown Ideal*, 308.

[21] Amela Karabegovic and Fred McMahon with Christy G. Black, *Economic Freedom of North America* (Vancouver, Canada: Fraser Institute, 2007). The full text of each of the annual reports is available on the Fraser Institute's website, http://www.freetheworld.com/efna.html.

[22] Arthur B. Laffer and Stephen Moore, *Rich States/Poor States: ALEC-Laffer State Economic Competitiveness Index* (Washington, D.C.: American Legislative Exchange Council, 2007). The full text of the report is available online at: http://www.alec.org/AM/Template.cfm?Section=Rich_States_Poor_States.

[23] Noel D. Campbell and Tammy M. Rogers, "Economic Freedom and Net Business Formation," *Cato Journal* 27 (Winter 2007): 23–36.

[24] Nathan J. Ashby, "Economic Freedom and Migration Flows between U.S. States," *Southern Economic Journal* 73 (January 2007): 677–697.

[25] Randall G. Krieg, "Human-Capital Selectivity in Interstate Migration," *Growth and Change* 22 (January 1991): 68–76; Susan B. Hansen, Carolyn Ban, and Leonard Huggins, "Explaining the 'Brain Drain' from Older Industrial Cities: The Pittsburgh Region," *Economic Development Quarterly* 17:2 (2003): 132–147. See also, Douglas T. Gurak and Mary M. Kritz, "The Interstate Migration of U.S. Immigrants: Individual and Contextual Determinants," *Social Forces* 78 (March 2000): 1017–1039. The topic of "brain drain" has also appeared frequently in the media and in state policy group reports.

[26] Steven F. Kreft and Russell S. Sobel, "Public Policy, Entrepreneurship, and Economic Freedom," *Cato Journal* 25 (Fall 2005): 595–616; and Russell S. Sobel, "Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship," *Journal of Business Venturing*, forthcoming.

[27] Two recent studies examine this topic: Nathan J. Ashby and Russell S. Sobel, "Income Inequality and Economic Freedom in the U.S. States," *Public Choice* 134 (March 2008): 329–346; Gerald W. Scully, "Economic Freedom and the Trade-Off between Inequality and Growth," NCPA Policy Report No. 309 (Dallas, TX: National Center for Policy Analysis, March 2008), available online at http:// www.ncpa.org/pub/st/st309.

[28] Russell S. Sobel, ed., *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It* (Morgantown, W.Va.: The Public Policy Foundation of West Virginia, 2007). This study's full text is also available online at http://www.be.wvu.edu/divecon/econ/sobel/UnleashingCapitalism/

[29] Andrew Bernstein, *The Capitalist Manifesto: The Historic, Economic, and Philosophic Case for Laissez-Faire* (Lanham, Md.: University Press of America, 2005), 293-332; Julian L. Simon, *The Ultimate Resource* 2, Revised Edition (Princeton: Princeton University Press, 1998), 491-512.

[30] Arthur C. Brooks, *Gross National Happiness: Why Happiness Matters for America—and How We Can Get More of It* (New York: Basic Books, 2008).

[31] See Lawrence J. McQuillan and Hovannes Abramyan, *U.S. Tort Liability Index: 2008 Report* (San Francisco: Pacific Research Institute, 2008); and Lawrence J. McQuillan, Hovannes Abramyan, and Anthony P. Archie, *Jackpot Justice: The True Cost of America's Tort System* (San Francisco: Pacific Research Institute, 2007).

[32] For a more technical explanation see G. S. Maddala, *Econometrics* (New York: McGraw-Hill, 1977), 193-94.

[33] See U.S. Census Bureau, Population Estimates Program, *Annual Population Estimates, Estimated Components of Population Change and Rates of the Components of Population Change for the United States and States: April 1, 2000 to July 1, 2007* (Washington, D.C.: U.S. Census Bureau, 2007). Of course, people migrate for reasons other than economic freedom, for example, for better schools, more jobs, higher income, or better weather. In our statistical analysis, we control for the influence on migration of other factors.

[34] John Rawls, *A Theory of Justice* (Boston: Belknap Press, 1971, revised 1999). A condensed version of the principle is available online at http://en.wikipedia.org/wiki/A_Theory_of_Justice.

[35] It is most useful to think of our index as an ordinal ranking, rather than a cardinal score. In other words, our index does not easily and directly allow one to speak on the overall level of economic freedom across time, only the relative level of freedom at a point in time. We believe, and economic studies on taxation support our view, that the important feature is the relative ranking of the states and the way people react to these varying degrees of relative economic freedom.

[36] http://www.sdreadytowork.com/DBISD/Startup/step9.asp.

[37] http://www.forbes.com/2008/03/19/best-business-cities-biz-bestplaces08-cx_kb_0319places_land.html.

[38] Lawrence J. McQuillan and Hovannes Abramyan, "Live Free or Move," *Wall Street Journal*, May 16, 2006.

[39] Brent M. Eastwood, *Explaining U.S. Urban Economic Growth 2000–2004: The Role of the Creative Class, Social Capital, Economic Freedom, Distributive Politics, and Defense Spending* (Morgantown, W.Va.: West Virginia University, 2007).

[40] Richard Florida, *The Rise of the Creative Class and How It's Transforming Work, Leisure, Community, and Everyday Life* (Cambridge, Mass.: Basic Books, 2002).

[41] Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000).

[42] Florida, *The Rise of the Creative Class*.

[43] www.bea.gov, Bureau of Economic Analysis, U.S. Department of Commerce.

[44] Ying Huang, Robert E. McCormick, and Lawrence J. McQuillan, *U.S. Economic Freedom Index: 2004 Report* (San Francisco: Pacific Research Institute, 2004), 23.

[45] Nick Gillespie, "Live Free and Die of Boredom," *Reason* (February 2005): 21.

[46] Ibid.

[47] Amela Karabegovic and Fred McMahon, *Economic Freedom of North America: 2005 Annual Report* (Vancouver, Canada: Fraser Institute, 2005), 43.

[48] Ibid.

[49] Ibid.
[50] Ibid.
[51] Ibid.
[52] Peter Fisher, “The Economic Freedom Index,” chapter in *Grading Places: What Do the Business Climate Rankings Really Tell Us?* (Washington, D.C.: Economic Policy Institute), 51.
[53] Ibid., 52.
[54] Ibid., 53.
[55] Ibid., 53.
[56] Ibid., 54.
[57] Ibid., 56.

About the Authors

LAWRENCE J. MCQUILLAN is director of business and economic studies and senior fellow in political economy at the Pacific Research Institute (PRI) in San Francisco. *Human Events* magazine describes him as a "distinguished conservative leader" in public policy.

Since joining PRI in 2001, Dr. McQuillan has specialized in tax, budget, regulation, and legal-reform issues. He is coauthor of *Jackpot Justice: The True Cost of America's Tort System* and the *U.S. Tort Liability Index*; these books have reached a combined audience of more than 77 million people. He is also coauthor of the *U.S. Economic Freedom Index*, published in association with *Forbes* magazine, which ranks the 50 U.S. states according to how friendly or unfriendly their state-government policies are toward free enterprise and consumer choice.

McQuillan speaks regularly to civic and policy groups across the country and with the national news media. His television appearances include NBC news, CNBC, FOX and CNNfn. YouTube hosts some of his interviews. He is a frequent guest on nationally syndicated radio talk shows including the *Ron Insana Show, Roger Hedgecock Show*, and *Jerry Doyle Show*. He counsels governors, legislators, and advocacy groups across the country; provides legislative testimony; and was a member of Governor Arnold Schwarzenegger's task force on a constitutional spending limit for California.

McQuillan has published more than 125 articles in such outlets as the *Wall Street Journal, USA Today, Forbes, Investor's Business Daily, National Review Online, Los Angeles Times, New York Post, San Francisco Chronicle, Washington Times*, and *Weekly Standard.* He has written on such topics as tax and spending limits, lawsuit abuse, pensions, workers' compensation, the housing crisis, and economic freedom. His recent writings include "Ambulance Chasers Bad for Our Health," "Make a Bad Mortgage: Take the Hit," and "Live Free or Move."

McQuillan created the quarterly *California Golden Fleece Awards*, exposing fraud and abuse in California government. Cited in *The Nation* and the *Los Angeles Times*, these awards led to the overhaul of the California Victim Compensation Program and helped reform California's workers' compensation system in 2003 and 2004.

From 1998 until 2001, McQuillan was a research fellow at the Hoover Institution, Stanford University, where he specialized in international economics. He edited the book *The International Monetary Fund—Financial Medic to the World?* (translated into Japanese) and wrote the study *The Case against the International Monetary Fund*, which Nobel laureate Milton Friedman reviewed as "excellent."

From 1993 until 1997, McQuillan was the founding publisher and contributing editor of *Economic Issues*, a national subscription newsletter based in Chapel Hill, North Carolina, that reviewed economic journal articles relevant to current public-policy issues.

While in graduate school at George Mason University in Fairfax, Virginia, where he earned a Ph.D. in economics, McQuillan was a research assistant for Nobel laureate James M. Buchanan and received the H. B. Earhart Fellowship for research excellence. Trinity University in San Antonio, Texas, awarded him a B.A. in economics and business administration.

MICHAEL T. MALONEY is a professor of economics in the John E. Walker Department of Economics at Clemson University in Clemson, South Carolina. Dr. Maloney started in 1974 at Clemson University. He was an associate professor of economics at Emory University in Atlanta, Georgia, from 1981 to 1982 before returning to Clemson University in 1982. Maloney was department head from 1984 to 1992, and served as a senior financial economist at the U.S. Securities and Exchange Commission in 1990.

Maloney is the associate editor of the *Journal of Corporate Finance* and is widely published on a number of topics including research and development in the drug industry, nuclear power and nonproliferation, and the complexity of financial markets. His recent publications include "The Determinants of Pharmaceutical Research and Development Investments," with Abdulkadir Civan, *Contributions to Economic Analysis & Policy* (2006); "The Complexity of Price Discovery in an Efficient Market: The Stock Market Reaction to the Challenger Crash," with Harold Mulherin, *Journal of Corporate Finance* (2003); and "Russian Commercial Nuclear Initiatives and U.S. Nuclear Nonproliferation Interests," with Oana Diaconu, *The Nonproliferation Review* (2003).

Maloney earned his Ph.D. in economics from Louisiana State University in Baton Rouge, Louisiana, in 1978; an M.A. from Western Illinois University in Macomb, Illinois, in 1971; and a B.A. from Lewis College in Romeoville, Illinois, in 1970.

ERIC DANIELS is a research assistant professor at the Clemson Institute for the Study of Capitalism at Clemson University in Clemson, South Carolina. He has lectured internationally on American history, particularly on American intellectual, business, and political history. Before joining the Clemson Institute, Dr. Daniels was on the faculty for five years at Duke University's Program on Values and Ethics in the Marketplace, where he was nominated for a university-wide teaching award.

Daniels contributed five entries to the *Oxford Companion to United States History* and wrote a chapter in *The Abolition of Antitrust*. Other writings have appeared in the *Atlanta Journal-Constitution* and the *San Diego Business Journal.* He has appeared on C-SPAN's *American Writers, II* series and on Voice of America radio.

Daniels earned his Ph.D. in American history from the University of Wisconsin at Madison. His B.A. in history and rhetoric is from Drake University in Des Moines, Iowa.

BRENT M. EASTWOOD is a political scientist who has served as a researcher at the RAND Corporation and taught at West Virginia University in Morgantown, West Virginia, and George Mason University School of Public Policy in Arlington, Virginia. His areas of specialization include economic policy, national security, international relations, and foreign policy.

Dr. Eastwood is a contributor to *The American* published by the American Enterprise Institute. His latest article was published in *American Foreign Policy Interests*, December 2007.

Eastwood earned a Ph.D. in political science from West Virginia University in Morgantown, West Virginia. He earned an M.A. in international relations and political science and an M.S. in journalism, both from West Virginia University. Oberlin College in Oberlin, Ohio, granted him a B.A. in English.

About the Pacific Research Institute

The Pacific Research Institute (PRI) champions freedom, opportunity, and personal responsibility by advancing free-market policy solutions. It provides practical solutions for the policy issues that impact the daily lives of all Americans, and demonstrates why the free market is more effective than the government at providing the important results we all seek: good schools, quality health care, a clean environment, and a robust economy.

Founded in 1979 and based in San Francisco, PRI is a non-profit, non-partisan organization supported by private contributions. Its activities include publications, public events, media commentary, community leadership, legislative testimony, and academic outreach.

EDUCATION STUDIES

PRI works to restore to all parents the basic right to choose the best educational opportunities for their children. Through research and grassroots outreach, PRI promotes parental choice in education, high academic standards, teacher quality, charter schools, and school-finance reform.

BUSINESS AND ECONOMIC STUDIES

PRI shows how the entrepreneurial spirit—the engine of economic growth and opportunity—is stifled by onerous taxes, regulations, and lawsuits. It advances policy reforms that promote a robust economy, consumer choice, and innovation.

HEALTH CARE STUDIES

PRI proposes market-based reforms that would improve affordability, access, quality, and consumer choice. PRI also demonstrates why a single-payer, Canadian model would be detrimental to the health care of all Americans.

TECHNOLOGY STUDIES

PRI advances policies to defend individual liberty, foster high-tech growth and innovation, and limit regulation.

ENVIRONMENTAL STUDIES

PRI reveals the dramatic and long-term trend towards a cleaner, healthier environment. It also examines and promotes the essential ingredients for abundant resources and environmental quality: property rights, markets, local action, and private initiative.

PRAISE FOR THE U.S. ECONOMIC FREEDOM INDEX: 2008 REPORT

The Pacific Research Institute's *U.S. Economic Freedom Index* confirms what economic theory predicts—states with greater economic freedom—lower tax rates, less government regulation, and limits on frivolous lawsuits—have better economic performance. The *Index* is a vital tool for lawmakers, business leaders, and all those who care about individual liberty and free markets.

Lawrence B. Lindsey
President and CEO of the Lindsey Group and former Director of the National Economic Council for President George W. Bush

PRI's latest analysis confirms that states that cut their marginal tax rates, enact right-to-work legislation, and limit frivolous jury awards see an influx of capital, people, and businesses.... The lesson is clear: policymakers and investors need to pay closer attention to the predictive power of a region's level of economic freedom.

Arthur B. Laffer, Ph.D.
Founder and Chairman, Laffer Associates and Member of President Ronald Reagan's Economic Policy Advisory Board

$24.95
ISBN 978-1-934276-10-5
52495>
9 781934 276105